Clinical Lectures

ON SOME

DISEASES OF WOMEN REMEDIABLE BY OPERATION.

BY I. BAKER BROWN, ESQ., F.R.C.S.

OVARIAN DROPSY.

HAVING illustrated the commoner errors of diagnosis, I now turn to ovarian dropsy. In ovarian dropsy there may be a simple unilocular or one-cavity cyst, or the growth may be multilocular, or with some solid growth attached to it. It has been commonly thought that unilocular ovarian dropsy (as I have stated in my work) was almost peculiar to the Fallopian tube. It was thought that in simple unilocular ovarian dropsy the cyst grew from the Fallopian tube, and that if it was multilocular it grew from the ovary. Until a few days ago I believed this was a trustworthy pathological law. But at the time I refer to, I assisted my friend, Mr. de Méric, at the German Hospital, to remove a large multilocular mass, which was entirely disconnected with the ovary. The growth was composed of hundreds of cysts, and it sprang from the broad ligament. If the cyst be unilocular I advocate the trial of tapping and pressure (a plan I have adopted for many years) before attempting extirpation. In the London Surgical Home tapping and pressure have led to the cure of four patients.

But suppose the patient is very anxious for an operation, and it has been decided that there is no other mode of cure, it is necessary to consider whether there are any reasons why an operation should not be performed. Inquiry is to be made into the condition of the patient; her general health, and especially into the state of the various organs—kidney, heart, and lungs—before an opinion is given. It should also be seen that the skin is healthy. Whilst these inquiries pertain to every great operation, they are especially necessary before ovariotomy. There should be no organic disease—no extreme emaciation from frequent tappings; there should, in fact, be no breaking down of the vital powers. It may be argued that such reasoning does not hold good, because many cases *in extremis* have recovered. It is true they have done so. I have seen them recover in my own practice when there seemed no hope of such recovery; but I maintain that such cases are exceptions to the rule. We have no right to expect a happy result when the vital power is low or exhausted. I therefore reiterate a recommendation which I have for years publicly advocated—namely, that we should operate as soon as the disease is found to be well-marked ovarian dropsy, in progression, or producing general discomfort or pain. The greatest success may be expected to attend very early operations.

The statistics of ovariotomy are well set forth in several works—by Clay, for example, in his translation of Kiwisch, and especially in the admirable book of Dr. Graily Hewitt, who says: "The average per-centage of cures will be found to be 65, the highest and lowest per-centages being 55 and 78 respectively. This is very satisfactory. If the result of recent operations only—that is to say, of operations practised within the last four years—had been given, it would be seen that a cure was effected by those who have operated most largely—Mr. Baker Brown, Dr. Clay, Dr. Tyler Smith, and Mr. Spencer Wells—in considerably over 60 per cent. of the cases." This is a very fair way of putting the case; but, perhaps, a little more favourably than it could be put if we had all the facts before us. It is the fairest and only way of putting it with the experience that we possess; but I happen to know of many instances which have not been published, where the operation has not been successful. This is to be regretted from the injury which surgical science suffers in consequence. But taking the facts as we have them, I think we may fairly say with Dr. Graily Hewitt, that the average per-centage of successful cases is now about 65, and I feel quite certain that if our operations were performed earlier, the per-centage would be as high as 75 or 80. The statistics of my own experience stand thus:—I have performed 58 complete operations. Of the cases thus treated, 26 died, and 32 were cured. This is a very unfavourable result as compared with that presented by some recent operators; but it must be borne in mind that when I began to operate many years ago, the subject was not so thoroughly understood as it is now. In answer to Dr. West's argument against ovariotomy, that the rate of mortality from the operation is not decreasing, the author I have just quoted says:—"It is sufficient to reply that great experience does not sustain it, and that, on the contrary, the mortality is decreasing. In proof of this, Mr. Baker Brown's experience is very instructive. The per-centage of success obtained by this operator was formerly 31; the per-centage of success in later operations has been 65." In the Surgical Home I have operated 32 times, with 11 deaths and 21 recoveries. It will be found that this is as high an average as that obtained by any operator, with one exception—namely, Dr. Tyler Smith.

Without extending these observations, I will now suppose that it has been agreed that a case shall be operated upon. What then, gentlemen, is the next step? It is to prepare the patient for operation. On this I lay very great stress. It is highly important that the operator should not only get the bowels cleared out and see that the kidneys are secreting healthily, but he should be especially careful that the skin is acting favourably and well. To secure this action the patient should have three or four warm baths in the course of a week or ten days. It will depend very much upon the action of the skin whether or not there is effusion into the peritoneum. I also give my patients steel in combination with tincture of arnica. Having got the patient perfectly prepared, and being careful to operate a week after the menstrual period, so that all the uterine organs may be in as quiet a state as possible, the next thing to consider is the position of the patient. There are various plans adopted, and each operator seems to follow his own; but in this, as in many other matters, little deviations make no difference in the real operation. I always place the patient on her back, with her legs protruding over the edge of the table, her head supported by a pillow; an assistant holds each leg widely apart from the other, and I stand between the legs. Under these circumstances the operation is one of the simplest in surgery. There is no difficulty in performing it. It requires merely a cool head, a steady hand, and a ready adaptation of means to ends. An incision is made of about two or three inches between the umbilicus and pubes. Two or three sweeps with the knife are made until the skin, fat, and muscle are divided. (Here I would give a caution. I used formerly not even to employ a director, but to cut down, carefully dissecting, quite through until I came to the cyst. The rapidity with which the operation was thus effected was tempting. One day, however, I happened to be in a more cautious mood than usual; I used my director, and came to a semi-transparent body lying just in the centre of the wound which I had made. It did not look like a cyst, and on examination I found it to be a knuckle of intestine, which had got fastened up, and which adhered to the cyst between the parietes and the tumour. It was easily detached, the adhesion not being of long standing, and the operation was proceeded with; but if I had gone on in my usual way, I might have cut into the bowel and so killed my patient.) Having dissected down to the peritoneum, a small opening is made, and a large broad-grooved director introduced; then, instead of using a knife, the point of which might do mischief, I employ a pair of scissors (Fig. 1). As the point is turned outwards, no possible harm can be done. The tumour is then seized with a pair of vulsellum forceps, which are held by an assistant or the operator. A large trocar is introduced into the cyst, and the fluid allowed to pass off as fast as practicable; and if there be more than one cyst, each is tapped until the mass is sufficiently reduced in size to come out of the opening which has been made. If it is found that the mass cannot be got through this opening, the incision should be extended upwards beyond the umbilicus, unless the cysts can be further tapped and so reduced sufficiently. Frequently a second pair of forceps will be required to hold the mass. If there be adhesions, they must be broken down or tied. If the adhesions be to the omentum, they must be first tied with silver wire and then cut off anterior to the ligature. (In one case, the whole of the omentum being adherent, I tied eight separate portions in this way, and in no one instance have I seen any ill result from such a course). Having thus removed the adhesions, an attempt must be made to withdraw the mass. If it does not come out, it is certain that there are adhesions underneath

in the pelvis, or on the pelvic rim. These adhesions must be traced out and broken down, if possible; if this cannot be done they must be separated, and tied with silver wire or twine. If with silver wire, let the ligatures remain in the cavity of the abdomen; if with twine, my plan is to bring the ligature outside. The next step is to bring the tumour out, and put it in a basin. It is then seen to which ovary the growth is attached, and whether the pedicle of the tumour is long or short. At this stage of the operation different plans are adopted by different ovariotomists. Dr. Clay uses a ligature of Indian hemp, and returns the tied pedicle into the cavity of the abdomen. Dr. Tyler Smith has latterly followed a practice first adopted by Dr. S. Rogers, in New York, in 1829, afterwards by Dr. Billinger, of the same city, in 1835, and by Dr. Siebold, of Darmstadt, in 1846—viz., of tying the pedicle, cutting the ligature off short, removing the tumour, and closing the whole wound at once. All these gentlemen have been successful. Dr. Tyler Smith has had seven or eight successful cases; and I hear that Mr. Fergusson has lately adopted this plan of procedure with success. If experience confirm these happy results, then certainly this plan will supersede both the twine or silk ligature and the clamp, which I and others generally use; for, as a rule, I employ a common clamp resembling a pair of carpenter's callipers, a little improved by our instrument maker, Mr. Pratt. It is a somewhat lighter instrument, but the principle is the same. The tumour is cut off close, and the clamp remains outside the abdomen. It happens sometimes that the pedicle is so broad that no clamp can grasp it, or the adhesions may extend from the pedicle, running up one side and occupying half the pelvic rim. We had a case of that description here, and we had to take up four different pieces. We had only three clamps; these were used, and the fourth piece was tied with Indian hemp. The patient made a capital recovery.

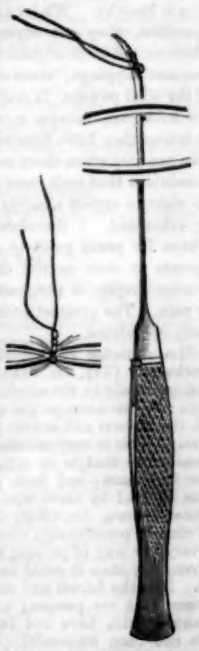
FIG. 1.

It is sometimes found that both ovaries are diseased, and the second should always be examined for the purpose of ascertaining whether such be the case or not. If the second be diseased, and cysts are found growing from it, it is better, if they are small, to cut them open down to the base, and then tie; or, if there are many of them, to tie or clamp (you cannot generally clamp) the ovary, and cut it off. Sometimes the second ovary will have as distinct and large a growth as the first that was removed. I have seen two instances in private practice where this was the case. Both patients did well. In the last operation we had in this institution both ovaries were diseased, the second less than the first; both had multilocular tumours. These tumours were secured by clamps in the way I have recommended, and this patient also made a good recovery.

Having so far succeeded, the next step is to remove any fluids or blood which may have escaped into the abdomen. I should have mentioned before, that to avoid the escape of blood from the cut wound, an assistant is required on each side with warm flannels in their hands. They grasp the edges of the wound, and hold them everted as the incision is made. If the wound bleed, the blood comes into the flannel; and if the intestines rise up, the flannels keep them back. There is, perhaps, no operation in surgery where more depends upon good assistants. But even after using the flannels, blood or fluid will sometimes escape into the cavity of the abdomen. And here again there is a diversity of opinion as to practice. Some recommend sponging-out freely from the cavity every particle of blood or fluid, and those gentlemen who advise this course have had great success; but I have myself, in more than one instance, seen the sponge do positive mischief. If the experiment be made of putting a piece of sponge into the cavity of the abdomen, letting it rest upon the peritoneum, it will be seen how soon the sponge will stick so firmly that it can hardly be torn off. In a case I once saw, I observed this danger. I saw that the sponge irritated the peritoneal coat very much, and therefore determined not to use it. I now use new, warm, Welsh flannel, and remove every clot of *blood* I can find; but with regard to simple fluid escaping from the cyst, unless it be of a purulent or acrid nature, I do not lay great stress upon getting it all out, and certainly the results have in my hands been just as good as where sponging has been employed. It has also happened, on more than one occasion where sponge has been used, that a piece of it has been left in the body, and has these remained undiscovered until the post-mortem examination disclosed it.

The next thing is the closing of the wound. Much has been said and much written upon this subject. Some have used hair-pins; some, silver sutures; some, three or four deep twine sutures, besides several interrupted sutures. Some lay great stress on enclosing the peritoneum; others say that the peritoneum is of secondary importance. Now it appears to me that the sutures should be placed as deep as the edges of the wound, so that every portion of divided tissue may be brought exactly in apposition. For this purpose it is not necessary to take up any of the peritoneum. The simplest way of passing the sutures is to have a needle like that represented in Fig. 2, which I had made on purpose. It is passed through the first side, and then the second; then the assistant threads the needle, and by simply twisting it back, withdraws it. Unfasten the wire suture, and the thing is done. By a simple twist of the wire three times upon itself the edges of the wound are brought perfectly together. The sutures are placed about half an inch distant from each other. When four, five, or six have been put in, the parts will be perfectly in apposition down to within an inch of the clamp. Here I come to another practical point. When the clamp is neared, the wound should not be closed exactly, because if it be so the pedicle will grow to the cut edges; and when the clamp is removed—which should be done in two, three, or four days, as soon as the parts of the pedicle are thoroughly dead—it will be found that the pedicle will be so adherent to the edges of the opening that it will not recede and fall within the cavity of the pelvis. This, again, I learned from experience in this institution, in two cases where I clamped, and kept the clamp on some six or seven days. The patients made good recoveries, but when menstruation came on, the skin broke over the stump, and there was vicarious menstruation every month. Believing this to be not only a most disagreeable but an undesirable result, I now leave a sufficient space between the clamp and the wound, so that when the clamp is taken off, the pedicle must fall in

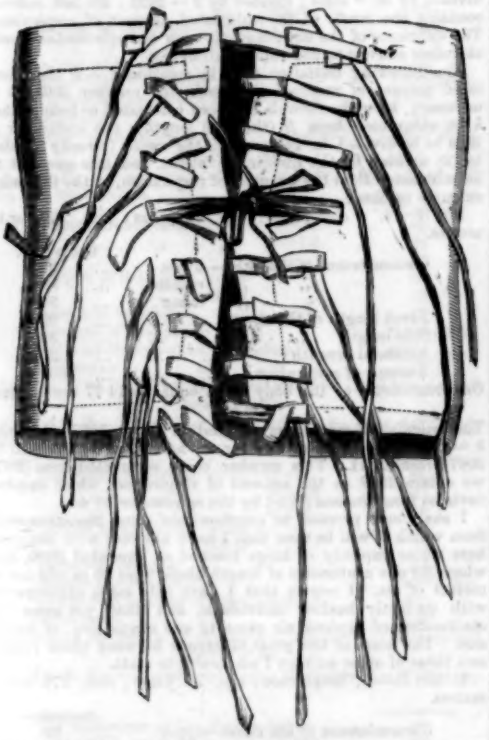
FIG. 2.



and be covered up by the subsequent union of the two edges, which are brought together by strips of plaster. I understand that this vicarious menstruation has been disbelieved in this city by some eminent physicians, but it is a fact which is well attested. I have recorded it in my book on Ovarian Dropsy, and it can be proved by the evidence of many gentlemen who have visited this institution. One lady on whom I operated frequently visited me, complaining of the great discomfort of this abnormal menstruation. This was four or five years ago. She is now pregnant for the first time in her life, and her pain is very great from the stump, which is thinly covered with skin. It will be seen, then, that the hint which I have just given is important.

The sutures having been placed, the wound is covered with oiled or wet lint; then a many-tailed flannel bandage of this kind (Fig. 3) is put on. I have used this bandage for many

FIG. 3.



years, and it has the advantage of being extremely easy of application. If the patient is bandaged with an ordinary flannel bandage, it is very irksome and detrimental. This one is made with two loops to enable it to be used larger or smaller. The string on one side is brought through the loop on the opposite side; and the string on that side which comes from the root of the loop is passed through the one on the opposite side. By this means the parts are brought perfectly in apposition, and the strings are tied in a bow. The advantages of this bandage are greater than at first appear. Tympanitis often follows this operation; and if the bandage is not such that it can be removed and altered at pleasure, the patient will suffer great discomfort. Now, the nurse or surgeon in attendance, finding tightness or distension, can loosen this bandage more or less as may be required; and when the wound requires dressing or looking at, the strings have but to be untied.

The next step is this: The patient being in bed, and presuming that she has been under the influence of chloroform, sickness, which may come on from the effects of the chloroform, has to be guarded against; and for this purpose ice is to be given, to be sucked freely, or iced soda-water. This sickness can almost always be avoided by giving the patient plenty of ice to suck some hours before the operation. It is most advisable to avoid sickness if possible, because it is apt to produce pain and mischief in the peritoneum, and in the wound itself.

The next point I would notice is the administration of opiates. Here, again, operators differ much. Dr. Clay, of Manchester, gives opium largely immediately after the operation—four grains at a dose; subsequently giving two or three grains every few hours, so as to keep the patient under the influence of the drug. He lays great stress upon this. I formerly did so; but I had occasion to find, from observation in this institution, that the opium itself creates sickness after chloroform. Here is another noteworthy fact: that opium produces sickness after chloroform. If, therefore, the use of opium can be avoided, it is better to do so. If the pain, however, be very severe, and it is not inflammatory, but arises from the stump, then two or three grains may be passed into the rectum. Generally speaking, two grains will be enough for the first twelve hours; but if the pain continue very great, the dose must be repeated. I now never trouble the stomach with anything after the operation beyond a little toast-water.

Now I come to the subject of diet. The patient should not be fed, but left entirely in the hands of nature. Let the stomach rest; and when the patient asks for anything, let toast-water be given, cold tea, or anything she asks for, in small quantities. After two or three days the patient will begin to ask for something more, when a little beef-tea or solid food may be given. But sometimes it will be found that patients begin to sink while unable to take food: they are seen running down, as it were, before our eyes. Here we come to a practice which invariably picks them up in the most marvellous manner: that of injecting small quantities of beef-tea and wine, or beef-tea and brandy (not more than two or three ounces), by the rectum. I have had cases in this Home in which the patients appeared as if they would and must die; but directly they have had the injection the pulse has steadied, the countenance has improved, and the patient has been better. We therefore often feed the patients for two, three, or even four days, entirely by the rectum. But care must be exercised not to feed too frequently. If it be attempted to feed more than once every six hours, or to give more than a wineglassful at a time, the rectum will not retain the quantity, and the object aimed at will be missed. Every six hours is the minimum of time; and the maximum of quantity is a wineglassful, which is about three ounces. From the third or fourth day the patient is treated in the ordinary way that any other patient would be treated, feeding her as she requires, with or without wine, according to her condition and her own inclination.

There is one other point which I must not omit to mention, on which there has been considerable controversy,—namely, the heat of the room in which the patient is placed. It was formerly considered, and is now by some, that the room should be at a high temperature and the air moist. I advocated this for many years, until we gradually became less careful about heat and moisture. This came upon us imperceptibly, until we had more air. We left the door open, and got the room cooler and cooler; and now our rule is, not to attempt to raise the temperature of the room, but to keep it comfortably cool, even with the window open. But we lay great stress upon keeping the patient herself warm, for we apply hot bottles to the feet, and keep the extremities in flannel, with light but warm covering. We desire that the patient shall be really warm; and the nurse can ascertain this by feeling the skin.

Now, as to the nurse. An operation may be performed in the best possible method, and everything be done that science can do and experience teach; but unless there is a very good nurse and very good assistants to sit with a patient constantly and watch her, it will be found that the patient will sink from want of attention. Certain feelings of faintness, exhaustion, or sickness will arise, all of which must be met at the moment, as they cannot be anticipated.

I have now, in conclusion, to direct your attention to a very interesting case of ovariotomy, on which I propose, in further illustration of the remarks I have made, to operate.

CASE 6.—Miss D——, thirty years of age, was admitted on the 9th of November last. She stated that she had always been in good health until four years ago, when she came under my care for abdominal enlargement, from which she had suffered some years. In this Home she was treated for unilocular ovarian cyst by tapping and pressure, and the result of that treatment was that the tumour disappeared, not returning till four months ago. Then her body began to fill, and I found that she had fluid, most likely in the same cyst again, and recommended her to have it extirpated. She has come here for that purpose. The case is interesting as having been apparently cured, four years ago, by pressure; then the disease re-

cently developing itself again without at all interfering with the patient's health. She is in most perfect health—indeed, I have seldom seen anyone so well; but the tumour has attained an enormous size. [The operation was then performed by Mr. Baker Brown, step by step, as just described.]

This, gentlemen, has proved a very easy operation; only one slight adhesion, and, as you have seen, completed in less than a quarter of an hour, the opening being under four inches. In a subsequent lecture I shall state the result.

ON SPIROMETRY.

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(*Concluded from p. 120.*)

ALTHOUGH by the aid of any of these methods, or by their combination, we cannot determine the absolute amount of respiration of a particular individual, the spirometer does notwithstanding deserve a more general application than it has hitherto received. It should not, I think, be absent from any place where a great number of chronic diseases of the lungs are treated annually. If even the absolute capacity of the lungs of these patients could not be ascertained, the spirometer would certainly be the instrument which could show most effectively whether the permeability of the lungs had, after certain intervals of time, decreased or increased in the course of treatment; and it would point out the same thing in regard to those patients who, after several months of absence, come again under observation and treatment. I therefore, in my former position as physician in Reinerz, a German spa, where thousands of lung diseases come under observation, found the application of the spirometer of great use, not only during the course of the case, but also in order to acquire a control over the patient, even in again treating him after many years. Thus the natural desire awoke in me to find some means to determine the absolute amount of respiration, or, as this is impossible, a number approaching the absolute amount. I clearly knew from the commencement that the length of the body could not be a criterion, for I could not and cannot now think what influence the thigh and the skull can exert upon the air-capacity of the lungs. The only thing which may be here considered is evidently the repository of the lungs—*the thorax;* and if there is no proportion between the thorax and the capacity of the lungs, the thigh certainly cannot show any. Nobody will ever think of calculating the cubic contents of a box from the string with which it may be tied. I have tried to calculate the thorax as a cylinder; I have tried it as a truncated cone. I have tried to deduct a certain *quantum* for the heart and vessels from the received result, but the success was not satisfactory. At last an empirical formula was found, which, should it prove a safe one by further investigations, would be a considerable step towards the truth.

With a spirometer by Hutchinson that Dr. Munk, assistant to Professor Traube, had the kindness to forward to me from Luhme's manufactory at Berlin, I have measured healthy, well-built individuals, who have never been ill. I have made a memorandum of the numbers, and then compared them with those obtained by calculation based upon the formula, and the difference has, as the undermentioned cases prove, never reached 300 cubic centimetres. I am in hopes that by me, and perhaps by others, further experiments will be made, and I believe that much would be gained if we could approach the absolute amount of respiration within 300 cubic centimetres. The formula rests upon measuring the thorax, in order to calculate its volume (V) from it. The upper, middle, and lower circumference of the chest are added, and divided by three. This quotient (x) is raised to the square, and the result is multiplied by the front length of the chest (h). This result is divided by 36 (produced by 12π, with omission of the decimals). Thus the formula is,

$$V = \frac{x^2\,h}{36}$$

The received quotient is taken in halves, and thus we obtain the amount of respiration. The following example will show it:—

Mr. A——, hotel-keeper; age, 38 years; size, 168 centimetres.

	Centimetres.
Upper circumference of the chest	96
Middle ,, ,, ...	96
Lower ,, ,, ...	95
Length of the chest in front	21
,, ,, on the sides	32
Acromial breadth	33
Amount of respiration	2400

Here is $x^2 = 95^2 = 9409$; this number $\times h = \times 21 = 189525$; divided by $36 = 5264$; divided by $2 = 2632$; the last number contains the result of the calculated amount of respiration. The difference of the one found through the spirometer would therefore amount to 232 cubic centimetres.

The following deviation must be mentioned:—If the calculated amount of respiration exceeds the number 3000, it is necessary, after the formula has been calculated as before, that h be subtracted from H (the side length); the remainder is then to be divided in halves, and the result (already divided by 2) divided by the dividing quotient, and this quotient to be subtracted from the quantity of respiration, as the following example teaches:—

Mr. S——, a clergyman; age, 26 years; size, 176 centimetres.

	Centimetres.
Circumference of the chest—upper ...	99
,, ,, ,, middle ...	89
,, ,, ,, lower ...	96
Front length of the chest	23
Side length ,, ,, ...	35
Acromial breadth	35½
Amount of respiration	2600

One centimetre of the body's size equal to 14·77 centimetres of air.

The calculated amount of respiration is = 3067 H minus $h = 35 - 23 = 12$; this number, in halves, = 6; divided, in 3067; result, 511. This number being subtracted from 3067, we obtain 2556 as the amount of respiration, which number deviates from the one found by the spirometer by 44.

I shall now proceed to communicate some measurements, from which it will be seen that I have not met with anybody here whose capacity of lungs reached or exceeded 3000, and where for one centimetre of length there were 20 or odd centimetres of air. I repeat that I have only made experiments with perfectly healthy individuals, and that yet some 10 centimetres of expired air came to one centimetre of bodily size. The cause of the great difference between these results and those of other authors I am unable to state.

1. Mr. B——, magistrate; age, 36 years; size, 173 centimetres.

	Centimetres.
Circumference of the chest—upper ...	89
,, ,, ,, middle ...	87
,, ,, ,, lower ...	83
Length of the chest—front	22
,, ,, sides	34
Acromial breadth	35
Amount of respiration	2800 cubic
Calculated amount of respiration	2930 ,,
Difference	130 ,,

1 centimetre of length of the body equal to 13·71 cubic centimetres of air.

2. Mr. T——, Secretary of the Post-office; age, 23 years; size, 173 centimetres.

	Centimetres.
Circumference of the chest—upper ...	90
,, ,, ,, middle ...	88
,, ,, ,, lower ..	84
Length of the chest—front	22
,, ,, sides	32
Acromial breadth	36
Amount of respiration	2600 cubic
Calculated amount of respiration	2314 ,,
Difference	286 ,,

1 centimetre of length of the body equal to 15·03 cubic centimetres of air.

3. Mr. H. B——, officer of the Guards; age, 26½ years; size, 175 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	90
,, ,, ,, middle	...	89
,, ,, ,, lower	...	85
Length of the chest—front	...	23
,, ,, sides	...	38
Acromial breadth	...	34
Amount of respiration	...	2400 cubic
Calculated amount of respiration ...	...	2473 ,,
Difference	...	73 ,,

1 centimetre of length of the body equal to 13·71 cubic centimetres of air.

4. Mr. P. T——, tragedian; age, 40 years; size, 171 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	92
,, ,, ,, middle	...	91
,, ,, ,, lower	...	90
Length of the chest—front	...	21
,, ,, sides	...	37
Acromial breadth	...	38
Amount of respiration	...	2500 cubic
Calculated amount of respiration ...	...	2415 ,,
Difference	...	85 ,,

1 centimetre of length of the body equal to 14·61 cubic centimetres of air.

5. Mr. H. W——, lieutenant of infantry; age, 37 years; size, 171 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	97
,, ,, ,, middle	...	98
,, ,, ,, lower	...	92
Length of the chest—front	...	21
,, ,, sides	...	35
Acromial breadth	...	37
Amount of respiration	...	2400 cubic
Calculated amount of respiration ...	...	2632 ,,
Difference	...	232 ,,

1 centimetre of length of the body equal to 12·86 cubic centimetres of air.

6. Mr. J. K——, weaver; age, 26 years; size, 167 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	86
,, ,, ,, middle	...	93
,, ,, ,, lower	...	80
Length of the chest—front	...	20
,, ,, sides	...	32½
Acromial breadth	...	34
Amount of respiration	...	1800 cubic
Calculated amount of respiration ...	...	1903 ,,
Difference	...	103 ,,

1 centimetre of length of the body equal to 10·75 cubic centimetres of air.

7. Mr. A. G——, merchant; age, 40 years; size, 170 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	87
,, ,, ,, middle	...	85
,, ,, ,, lower	...	83
Length of the chest—front	...	22
,, ,, sides	...	34
Acromial breadth	...	34
Amount of respiration	...	2400 cubic
Calculated amount of respiration ...	...	2207 ,,
Difference	...	193 ,,

1 centimetre of length of the body equal to 14·11 cubic centimetres of air.

8. Mr. D. K——, glasscutter; age, 45 years; size, 163 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	99
,, ,, ,, middle	...	98
,, ,, ,, lower	...	93
Length of the chest—front	...	21
,, ,, sides	...	31
Acromial breadth	...	39
Amount of respiration	...	2560 cubic
Calculated amount of respiration ...	...	2715 ,,
Difference	...	155 ,,

1 centimetre of length of the body equal to 15·70 cubic centimetres of air.

9. Mr. D. S——, merchant; age, 36 years; size, 169 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	92
,, ,, ,, middle	...	89½
,, ,, ,, lower	...	87
Length of the chest—front	...	22
,, ,, sides	...	33
Acromial breadth	...	33
Amount of respiration	...	2400 cubic
Calculated amount of respiration ...	...	2420 ,,
Difference	...	20 ,,

1 centimetre of length of the body equal to 14·20 cubic centimetres of air.

10. Dr. M——, physician; age, 27 years; size, 175 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	93
,, ,, ,, middle	...	91
,, ,, ,, lower	...	88
Length of the chest—front	...	23
,, ,, sides	...	34
Acromial breadth	...	34
Amount of respiration	...	2850 cubic
Calculated amount of respiration ...	...	2631 ,,
Difference	...	219 ,,

1 centimetre of length of the body equal to 16·28 cubic centimetres of air.

11. Mr. de S——, landed proprietor; age, 24 years; size, 170 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	92
,, ,, ,, middle	...	91
,, ,, ,, lower	...	84
Length of the chest—front	...	23
,, ,, sides	...	34
Acromial breadth	...	33
Amount of respiration	...	2400 cubic
Calculated amount of respiration ...	...	2530 ,,
Difference	...	130 ,,

1 centimetre of length of the body equal to 14·70 cubic centimetres of air.

12. Mr. M. V——, student of medicine; age, 20 years; size, 171 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	91
,, ,, ,, middle	...	91
,, ,, ,, lower	...	87
Length of the chest—front	...	23
,, ,, sides	...	37
Acromial breadth	...	33
Amount of respiration	...	2800 cubic
Calculated amount of respiration ...	...	2530 ,,
Difference	...	270 ,,

1 centimetre of length of the body equal to 16·43 cubic centimetres of air.

13. Mr. J. T——, hotel-keeper; age, 29 years; size, 170 centimetres.

	Centimetres.	
Circumference of the chest—upper	...	87
,, ,, ,, middle	...	85
,, ,, ,, lower	...	83
Length of the chest—front	...	24
,, ,, sides	...	35
Acromial breadth	...	34
Amount of respiration	...	2300 cubic
Calculated amount of respiration ...	...	2408 ,,
Difference	...	108 ,,

1 centimetre of length of the body equal to 13·52 cubic centimetres of air.

It is understood that care is required to avoid sources of error in the use of the spirometer. Most persons must first practise a powerful inspiration, and an expiration as perfect as possible, before their amount of respiration can be noted down. Only when one is convinced, by repeatedly trying, that the necessary proficiency has been acquired, can one allow them to blow into the spirometer and note the mean number. For women the necessary practice is more difficult; and with children I consider it almost impossible to draw any correct conclusions from the quantity of air found by the spirometer. To keep the nose closed in the expiration is, if the gums be not defective, altogether superfluous.

Woburn-place, Jan. 1864.

A CASE ILLUSTRATING THE

DANGERS OF SLAUGHTERING DISEASED CATTLE.

BY JOHN GAMGEE, ESQ.,

PROFESSOR OF VETERINARY MEDICINE AND SURGERY, NEW VETERINARY COLLEGE, EDINBURGH.

ON the 22nd of October, 1863, a bull was taken ill on a farm and in a county which I decline to name. My reasons for not mentioning the place are, that every effort has been made to keep the secret, as in a host of similar cases, and it will serve no purpose whatever to expose those who, in ignorance and in consequence of the lax state of our laws on this subject, acted as their neighbours would have done. A labourer on the farm, who had been formerly a butcher, volunteered to slaughter the sick bull, that its carcase might be saved for the butcher's stall. Unfortunately, the poor man had previously injured his hand with a spade, and he performed his task without due regard to the condition of his wound. It is said that the bull was dying from pleuro-pneumonia, but others declare the disease was of too rapid a type to be the very prevalent lung complaint. Certain it is that four pigs died after eating part of the viscera of the bull, and two dogs nearly lost their lives in the same way.

The bull was disposed of to a butcher for the sum of £5, and after this, not only was it seen that the pigs and dogs had been injured by eating the flesh, but the labourer suffered intense pain in his hand, was seized with severe febrile symptoms, and died on the fourth day after dressing the bull.

I am favoured by a surgeon with the following report of the case:—

"I saw the man for the first time on the second day before his death. I then found a ragged wound, about an inch long, nearly dividing the tendon of the back of the second finger of the right hand. The edges of the wound, for about three-eighths of an inch all round, were very much swollen and dark-coloured; in fact, the wound looked like an opening made with a blunt instrument. The swelling was well defined; there was also severe cellular inflammation of the arm to the elbow, with the usual boggy feel all over, from the back of the hand upward. Fever and the usual symptoms of severe cellular inflammation prevailed, notwithstanding tonics and stimulants. The man sank rapidly (the fever having turned to typhoid), and died on the second morning after I saw him. He was much addicted to habits of intemperance."

Many of the readers of THE LANCET may suppose that this is a solitary case, or, at all events, a rare one. The usual question may be asked, Why should I, as a surgeon of so many years' experience, not have heard of or seen such cases? To my own knowledge, four other men have died, presenting symptoms such as the above, under similar circumstances and in the same county, during the last four years. Another man, a butcher, nearly lost his life, and the surgeon who attended him asked him what he had done with the diseased cattle he had dressed. This question was asked as the surgeon feared that the carcases were at that time being cut up in the town where they had been slaughtered; but he was somewhat consoled by the usual reply, "They're been sent to London."

During the past year the attention of a number of gentlemen has been directed to cases of serious illness and death in various parts of the country. A landed proprietor wrote me concerning an instance in East Lothian. An animal was slaughtered, packed in a basket, and sent either to Edinburgh or London. After the carcase had been despatched, the pigs were taken ill, and several died; they had eaten of the animal's entrails. The man who dressed the bullock nearly lost his life, and only recovered after nearly losing his eyesight. Some liquid from the thorax was splashed against this man's face, and he suffered severely from inflammation of the face and trunk. His eyes were most seriously affected, and vision has only been restored in one.

In the Edinburgh slaughter-houses similar accidents have been witnessed, though every effort is made to conceal the truth; and one case, which occurred in 1863, was identical with the one that occurred in East Lothian. During the outbreak of malignant anthrax in Lincolnshire last autumn a shepherd scratched his arm whilst dressing a sheep, and he very nearly lost his life.

It is now about fourteen years since I first began to agitate the question of cattle disease in relation to the public health. During that time I have reported outbreaks of anthrax and of splenic apoplexy, and have repeatedly drawn attention to the deaths amongst pigs, dogs, ferrets, &c., from eating the viscera of diseased cattle slaughtered. I have striven, as best I could, to specify the form of disease communicable to man, and which renders the flesh of such animals unwholesome; and my opinion, based on a very careful consideration of the whole subject, is, that the public health is materially affected by the wholesale slaughter of diseased animals as human food. Several years ago I declared that it was impossible that human beings were not frequently injured by the eating of the flesh of cattle that had died of splenic apoplexy in this country; and the reason why cases have not been published is, that the carcases have been sent to large cities, *where they would not be distinguished from the carcases of perfectly healthy animals*, and the evil results of eating the poisonous flesh could not be distinguished from any ordinary case of dysentery or typhus. The best proof of defective observation on these subjects is afforded us by the trichinous disease, of which not a single fatal case has been recorded in this country, but many abroad. That the disease is often amongst us is certain, and the infant that died in Paisley last year, as the result of eating "measly (?) pork," undoubtedly, in my mind, succumbed to trichinous infection.

Knowledge gathers slowly, and medical men must proceed with prudence in drawing inferences from cases observed; but I hold that they have hesitated too much and too long in raising their voices against the filthy and demoralizing practice of slaughtering diseased animals as human food. With a proper organization, I will engage to reduce the mortality in the London dairies from forty and fifty per cent. per annum to four and five. This would at once prevent the sale of several thousand diseased cows as human food in the metropolis alone. Would not such work be better worth paying for than inspection of markets? and is it not worthy of the strongest recommendation on the ground of economy, if not on that of saving human life? We "strain at a gnat and swallow a camel" when we condemn the French for their vivisections, and allow our population to be cut down in thousands by painful and preventable diseases. On no ground can we defend the slaughter of diseased cattle, and medical officers of health need not wish to be fortified by evidence of cases of death in man from eating diseased meat in order to interfere vigorously with the traffic in diseased animals. That traffic is the most potent cause of disease in animals themselves, and unless checked our stock-owners will suffer even more in the future than they have in the past. We cannot keep pace with the demand for meat, and prices are ruling higher every year. To secure an adequate supply of wholesome animal food we must devote ourselves to the prevention of disease amongst animals, and no greater blunder was ever committed than that of declaring that our poor must starve if we condemn all the diseased animals sent to the butcher. The poor may console themselves a little by the reflection that it is the finest cattle in the best condition that usually die of splenic apoplexy, and the accidents which befel the pigs and ferrets from this cause are more likely to be witnessed in the homes of the wealthy than in those of people who cannot afford to pay the highest market price for beef.

THE MURDER NEAR LEOMINSTER.

REPORT OF THE INJURIES AND OF THE POST-MORTEM EXAMINATION OF THE DECEASED.

BY EUGENE GODDARD, M.R.C.S.E.

MARY ANN WATKINS, the wife of a deserter from her Majesty's service, was found about ten P.M. on the night of the 18th ult. lying on her face in a pool of blood, insensible, and with several gaping wounds in her head. She was placed in a cart and brought to the Leominster Union Workhouse, where I was called to her at a few minutes to one A.M., and attended directly. She appeared perfectly unconscious; the surface and extremities were cold; the pupils insensible to light and moderately contracted; respiration comparatively quiet, but slow; pulse scarcely perceptible. On examining the head I saw a small clean wound, about an inch long, in the median line, just above the forehead; a second, about six inches long, also having a smooth edge, extending across from the upper poste-

rior angle of the right parietal bone to the squamous portion of the temporal bone, and exposing a gaping fracture of the skull, through which brain-substance was protruding, and portions of pericranium were hanging down in bruised and torn strips. Posteriorly there was a wound eight inches long, extending in a curved direction over the upper part of the occipital bone and the posterior inferior angle of the right parietal as far as about the base of the zygoma, exposing a comminuted fracture of these bones in the same direction as the wound. There were some fragments of brain-matter about her hair and a neckerchief which she wore, and I had observed some about the straw of the cart in which she was brought to the workhouse. Altogether, her symptoms promised a speedy death. Nevertheless I gently removed the hair, cleaned the wounds, and applied cold to the whole of the head. Meantime, hot bottles had been placed at her feet, she had been partially undressed and wrapped in blankets, &c. By daylight reaction had set in, and with it symptoms of compression; the breathing became stertorous; the pulse perceptible but small, and about 30 or 32; the surface hot; the pupils slightly dilated. Two or three teaspoonfuls of beef-tea were administered with difficulty during the day, and in the afternoon she was reported to have said "Oh dear!" twice. She never became conscious, however, and died at nine o'clock in the evening, twenty hours after admission.

Thirty-six hours after death I made a careful post-mortem examination by order of the coroner, and was assisted by my friend and colleague, Mr. A. G. Chattaway, of Kingsland, near Leominster.

External appearances: She was a well-conditioned, healthy-looking woman. There was a bruise over the right frontal protuberance; both eyelids ecchymosed; a swelling of the upper lip, and a slight abrasion from the right corner of the mouth; a short straight contusion on the right shoulder; a large patch of bruise on the upper part of the right arm; sundry small scratches and bruises on both wrists; trunk and legs free from marks; opisthotonos considerable.—Head: In addition to the wounds already described, there was an irregular jagged wound, two inches long, over the left parietal eminence. The posterior wound presented these peculiar appearances: its lower edge was jagged, its upper tolerably smooth; in the centre it gaped about an inch, and there was a good deal of hair pushed in over its lower edge, some score or so of hairs being found between the fractured pieces of bone, and adherent to the brain-substance. On carefully dissecting off the integument, pericranium, &c., the occipital bone was observed to be much comminuted, whence the fracture proceeded in a somewhat star fashion in two or three directions round the right side of the head, some of these lines communicating so as to detach two large and two or three small pieces of the calvaria, while a single fine line of fracture extended from these across the coronal suture to the centre of the frontal bone. In addition to these, there was an isolated oval fracture about the size and shape of a pigeon's egg immediately beneath the small and apparently incised wound first mentioned. The brain and membranes were healthy; a good deal of the right hemisphere was destroyed and absent, probably three or four ounces; normal amount of fluid in the ventricles.—Chest and abdomen: With the exception of some pleuritic adhesions and a small multilocular cyst attached to the right ovary, there was no trace of disease in any organ of the body.

In endeavouring to account for these injuries, I was struck by the appearance of the posterior wound, the upper edge projecting beyond the lower, the lower edge being jagged and turned in, &c. It seemed clearly to have been caused by a blow from below upwards—probably a kick. This, I think, is supported by the fact that the wound exposed a comminuted fracture of the strongest part of the skull. The anterior wound, with its little island of fracture beneath, and the middle wound, with its sharply-defined fracture, were not so clearly to be accounted for.

On the 20th ult. I visited the spot where the body was found. It was in a ploughed field, and there was no stone or rock or hard surface anywhere about. I may here state that the police observed some remarkable footprints about the field and in an adjoining orchard; that they followed these tracks for many miles over the country during the next three days; that on the evening of the third day they overtook the husband of the deceased, with "clogs" on his feet perfectly corresponding with the footprints they had been tracking from the scene of the tragedy. These clogs were produced at the inquest and before the magistrates; they were of the shape of an ordinary boot; the sole and heel were of wood about three quarters of an inch thick, bordered entirely by a narrow rim of iron something like the bottom of a skate. I stated at the inquest and before the magistrates that such a boot would probably account for the posterior fracture, and also, but less probably, for the other wounds and fractures. The short straight bruise on the shoulder looked as if it had been caused by a stick, and evidence of the prisoner having been seen with a stick on the day of the murder was subsequently produced. On this evidence, substantiated by proofs of his having uttered violent threats against his wife, the man stands committed to take his trial for wilful murder at the next Hereford assizes. It is to be hoped that, if guilty, he will by a full confession enable us to see how far the conclusions arrived at from the nature of the injuries are accurate, as this would tend to show the value of such inferences in any similar case.

Leominster, Feb. 1864.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum, et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI: *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

SUBCUTANEOUS MELANOSIS, SCATTERED OVER THE TRUNK AND EXTREMITIES, THE "TUBERCULATED SARCOMA" OF MR. ABERNETHY.

(Under the care of Mr. LAWRENCE.)

THERE is a rare and somewhat remarkable case at the present time in the above hospital, and which is deserving of an early notice before it reaches a final and fatal termination. It is an example, Mr. Lawrence remarked at the patient's bedside, of the "tuberculated sarcoma" of Mr. Abernethy, described by that surgeon many years back, and of which he (Mr. Lawrence) had himself seen but one other example.

The patient, James F——, aged thirty-three, a porter, thin and emaciated, was admitted on the 28th of January, stating that he had been ill since a week before Christmas. Some eighteen months ago small nodules or grains began to form on various parts of the abdomen, which gradually extended to the chest and posterior part of the trunk of the body. Some are now appearing on the inner side of the arms, especially the left; but the trunk and upper extremities are the parts chiefly affected. Emaciation has been rapid quite recently, his appetite has failed, and he feels weak and debilitated and has a peculiar look of anguish and misery. He does not appear to suffer any pain except in the loins. The nodules are mostly small, in size from a millet-seed to a pea or a bean, and seem to be situated beneath the integument in the subcutaneous areolar tissue, although it is probable that some, possibly a large number, may have already invaded the skin. Through the skin they possess a distinct blue colour, like knobs on veins, and at first sight they look as if all the cutaneous veins were knotted here and there. At the right groin is an irregular mass, the size of a small Seville orange, very soft and spongy, and apparently not an involved gland. The man has latterly commenced to pass blood in his urine, which, taken with a pain or soreness in the loins, would point to a probable extension of the disease not only to the kidneys, but very likely to other internal organs. His breathing a fortnight ago was hurried and rapid, as if a similar invasion of disease was taking place in the lungs. He is well supported by good nourishment and plenty of stimulants, and the treatment is palliative, for the disease is incurable.

There can be no doubt that the disease is disseminated melanosis, associated either with scirrhous or encephaloid cancer, and analogous to the secondary growths of a malignant nature appearing in various internal organs. This form of disease is accurately noticed in Dr. Walshe's monograph on Cancer, under the division of the disease involving the subcutaneous cellular tissue. In the great majority of cases, he states, the structure of the nodules has been encephaloid, although

sometimes actually scirrhous. In a case recorded by Cruveilhier they were abundantly infiltrated with melanotic matter, and exhibited all the varieties of hue caused by the presence of that matter in various proportions. In thirteen cases analyzed by Mr. Dorrington, the tumours were seated on the head, neck, trunk, and extremities in two; on the neck, trunk, and extremities in three; on the head and trunk in one; on the neck and extremities in two; on the trunk only in four. In about half of the recorded cases, the colour of the skin has remained unaffected upon and in the neighbourhood of these nodules. Different forms of violet, blackish, or purplish discoloration have been noticed in others. In Mr. Lawrence's patient the colour is blue, as already mentioned; but there are large patches on the abdomen of clear discoloration, resembling pityriasis versicolor.

The lymphatic glands are less frequently affected than is usual in other cases, and pain is rare, occurring but in two or three instances; in Mr. Abernethy's case it was not severe. Dr. Walshe adds that "the appetite fails, emaciation and straw-coloured discoloration of the skin follow, and the strength and vital powers rapidly decline." We shall watch the progress of the case, and record its termination.

ST. GEORGE'S HOSPITAL.

EXTENSIVE TUBERCULOUS DISEASE ON THE EXTERNAL SURFACES OF THE PERITONEUM, WITH PERFORATION OF THE BOWEL.

(Under the care of Dr. PAGE.)

A STRIKING analogy exists between the above case of Mr. Lawrence, and the one which now follows. In the former, melanotic deposit occurred beneath the skin in various parts of the areolar tissue; and in the latter, extensive tuberculous deposit formed in the same tissue external to the sac of the peritoneum, but seriously encroaching upon and involving some of the abdominal organs. The same structure in both cases was the original seat of the disease.

Ann W——, aged forty-three, admitted March 11th, 1863. She had had good health until five months before her admission, when, during menstruation, the catamenia suddenly ceased, and had never reappeared except very scantily. A few weeks later she was attacked by diarrhœa accompanied with griping pains. She had always been previously of a costive habit. At the commencement of the diarrhœa she noticed small clots of blood in the motions, but latterly nothing particular had been observed. At first, medicine had checked the diarrhœa; but for the last six weeks she had derived no benefit from treatment, and the bowels had been open about three times a day. Her strength and flesh had wasted rapidly.

On admission, she was very emaciated and old-looking. The abdomen was soft and unresisting; there was some tenderness when heavy pressure was made over the umbilicus; and gurgling was heard all over the abdomen. The breathing at the apices was tolerably good, though feeble; pulse 108; skin warm; appetite fair. She was put upon quinine, opium, and cardamoms. On March 14th nothing particular was observed in the stools. On the 16th she complained of shivering, and was weaker. No further change occurred up to the time of her death, which took place very quietly on March 18th.

Autopsy, sixteen hours after death.—The body was extremely emaciated. Both pleuræ contained old adhesions. The apex of the left lung contained vomicæ and crude tubercle; the other lung was natural. Heart small. The space between the liver and diaphragm was occupied by a large quantity of opaque, whitish matter, resembling crude tubercle; this in some places formed a layer half an inch thick, by which the surface of the liver was indented. The matter was quite extra-vascular, and was external to the peritoneum covering the adjacent surfaces. Masses of the same deposit existed between the folds of the membrane forming the mesentery, and also between the peritoneum and the abdominal wall. Small nodules existed on the outside of the bowels, just under the peritoneal coat. From the inside these formations could be seen projecting into the canal, covered by mucous membrane and muscular tissue. They seemed to have no tendency to occasion relaxation. The bowels were generally united by recent peritonitis, more especially towards the pelvis; and tubercular matter was deposited among the adhesions. When the intestines within the pelvis were displaced, a foul fæcal cavity was broken into, with which the intestine communicated, six inches above the ileo-cæcal valve. The bowel was here nearly severed by ulceration, but it was not clear whether this was in consequence of tubercular disease or not. All the mucous membrane in the neighbourhood of the perforation was healthy. A portion of the large intestine also appeared to communicate with the fæcal abscess; but the bowels were so bound together by adhesions, and so confused with fæces and pus, that they were not completely disentangled. The abscess was quite circumscribed. The Fallopian tubes were full of soft tuberculous deposit. The liver (with the exception stated), the spleen, the kidneys, and the supra-renal capsules, were natural.

GUY'S HOSPITAL.

MALIGNANT TUMOUR ABOUT THE KIDNEY.

(Under the care of Dr. GULL.)

THOMAS H——, aged eleven, admitted into John ward Feb. 11th, 1863. He had been sent up from Swindon with a large tumour in the abdomen, which had been growing for some months. The abdomen was much enlarged by a tumour which sprang from the left side; there was obscure fluctuation in it. The boy was ill and thin. This constitutional disturbance, together with the undecided fluctuation, was an argument against its hydatid nature. Mr. Birkett, however, explored and extracted a little gelatinous matter. The boy gradually died, worn out, on Feb. 27th.

Autopsy, eighteen hours after death.—The body was very thin, and the abdomen large. The belly was distended with a large tumour which sprang from the left loin, but nearly filled its cavity, reaching from the diaphragm above to the pelvis below, and nearly over to the right side. It was in contact with the parietes in front, and thus the intestines lay coiled up in a small compass on the right side; the transverse colon above and the descending ran down the front aspect of the tumour. Above lay a small spleen attached. On removing all these parts, the tumour was found intimately connected, and involving, if not springing from, the left kidney. On examining its posterior surface, the kidney was seen about twice its usual size and length, stretched over the tumour, its upper part being entire, whilst the lower part was involved in the disease. On making a horizontal section of it, it was seen that the anterior part of the organ was almost destroyed, and this was more especially the case at its lower part. Above, the upper part of the kidney was untouched even on its exterior surface; but below this it became gradually more involved until the lower end of the kidney was almost destroyed by the disease; the outline of it, however, remained. On cutting through the tumour, the contents were found to be semi-fluid, and composed of broken-up tissue and fibrin of blood. It was only at the lower part that the original growth was seen. This, which at first sight appeared to be soft cancer, was found to emit no juice on pressure, but corresponded rather to the softer varieties of the recurrent fibroid. Some parts contained a gelatinous fluid in the meshes.

EPILEPSY FROM DEPOSIT IN THE BRAIN.

(Under the care of Dr. BARLOW.)

James C——, aged forty, was admitted into Philip ward on the 13th of August, 1863. This man had been in better circumstances, and came to the hospital asking for admission, apparently not having sufficient nourishment. He walked to the ward; but was in a dull, apathetic state. Towards night he was found to be insensible, with stertor, and convulsive movements of the limbs. He thus continued for five or six hours—until death on the morning of the 14th. It transpired afterwards that he had led a life of dissipation, and his associates had been of the worst character. One of them said he had had syphilis, and for some time had complained of his head, and felt dizzy; but believed he had never had a fit.

Autopsy, nine hours after death.—The body was tolerably developed and healthy-looking. There was no sign of injury about the head. On removing the dura mater, the convolutions were rather flattened, and the surface of the brain did not seem perfectly smooth and shiny; but was rather sticky, as if a slight exudation had occurred. Over the right temporal region the dura mater was much thickened (but quite free from the bone), and adherent to the brain. On forcibly tearing this off, the cerebral structure was lacerated; and within was a hard yellow mass about the size of a walnut. This involved the cineritious structure, and adhered to the membranes. The medullary matter around was translucent, as if infiltrated with

serum, and rather soft. There was excess of fluid in the ventricles. Over the left temporal region the dura mater was somewhat thicker than natural. The brain was otherwise healthy. The appearances resembled those of syphilis. The lungs were exceedingly congested—almost apoplectic, as in paralysis of the lung.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

MR. PRESCOTT HEWETT, PRESIDENT.

MULTIPLE FATTY TUMOURS.

MR. SAUL introduced a man aged fifty-one, whose limbs and back were covered with small tumours; it was impossible to say how many there were. The tumours varied from the size of a small nut to that of a chesnut. They had the appearance of fatty tumours, and were thought by many of the members all to be so.

Dr. MURCHISON mentioned some cases which he had seen as illustrative of the present one.

Mr. NUNN expressed a doubt as to all the tumours being fatty.

OBSTRUCTION OF PULMONARY VESSELS BY COAGULA.

Dr. DICKINSON showed this specimen from a young woman who died suddenly in St. George's Hospital. She was the subject of hysteria at first; subsequently œdema of the leg was observed; and a few hours afterwards she died suddenly in the watercloset, apparently from syncope. The post-mortem discovered as the only cause of death a large clot extending from the right ventricle into both pulmonary arteries. The femoral artery and vein were blocked with coagula. The pulmonary vessels were in themselves healthy.

In reply to a question from Mr. S. WELLS,

Dr. DICKINSON believed that there might be some change in the blood itself to occasion the coagulum in question.

Dr. BRISTOWE had had a very similar case under his care in the hospital. A woman, after some slight pleurodynia, being convalescent, died in the same manner; and the pulmonary arteries, to their minutest ramifications, were found completely blocked with fibrous coagula. The character of the clot indicated the length of time it had been forming.

Mr. HULKE spoke of a case of disease of the supra-renal capsules in which the same fatal event took place.

Dr. G. HEWITT alluded to the relations which appeared to exist between this event and the previous existence of uterine derangement—after accouchement for example,—naming an illustrative case.

Dr. HARLEY spoke of the importance of distinguishing between clots found before and after death. The only means by which a judgment could be formed was the degree of solidity. He believed that only those which were found before death had the appearance of "switched fibrin."

Dr. DICKINSON said that the uterus was perfectly healthy. The uterine veins were not examined. The fibrin was very firm, light in colour, adherent to the veins in which they existed, and somewhat brittle.

ACUTE NECROSIS OF THE STERNUM.

Dr. MURCHISON showed this as remarkable in several respects. A lad, aged eighteen, with enteric fever, having every symptom but the rash, and well marked. There were also some signs of pleurisy at the base of the right lung. Then some swelling of the larger joints; then of the smaller ones. Then an abscess in the superficial cellular tissue in the foot. Next a swelling took place over the centre of the sternum, and very suddenly. It pulsated with every beat of the heart, as if a pulsating empyema. Severe pain followed. A trocar was introduced, and an ounce of pus issued, giving great relief. It soon refilled; a free incision was made, and a probe detected the bare bone of the sternum, and through it the probe moved up and down with each beat of the heart. Air also passed inwards and outwards. The patient became gradually worse. It appeared further that the sternum seemed to be in two pieces, and that each moved on the other. He died three or four weeks after the commencement of his illness. No rigors had taken place at any time.

At the post-mortem it was found that extensive necrosis of the sternum existed, with a circumscribed cavity behind the sac of the abscess, but no communication with the pleura. The bowels were healthy. The lungs contained an abscess; the kidneys, several small deposits. The right iliac bone was necrosed, and the acromion process of one side also. Other abscesses existed in the soft parts in different parts of the body. What was the nature of the case? There was pyæmia, but the cause was unknown. He came from a quarter where typhus was prevalent, and he might have had it just before admission and purulent deposits were known to follow typhus. No abnormal appearances were noticed in the blood itself.

In reply to the PRESIDENT,

Dr. MURCHISON stated that pyæmia was rare in typhoid fever.

The PRESIDENT had recently seen two cases of purulent deposits after typhoid fever.

Dr. WILKS said the symptoms of typhoid fever and of pyæmia were identical.

Dr. BRISTOWE corroborated the view of Dr. Wilks.

Dr. LEARED raised the question as to the possibility of the case being scarlet fever.

Dr. MURCHISON replied that there was no sign whatever of it, while the symptoms were those of typhoid.

CONGENITAL TUMOUR.

Mr. HOLMES showed a congenital tumour removed from beneath the sterno-mastoid muscle of a boy aged eight years. It had the character of udder in consistence. It was the third case of the kind which had been under his care. Mr. Holmes alluded to these and to others related by Mr. C. Hawkins.

The PRESIDENT related the case of an infant with a large congenital tumour of the neck. An attempt was made to remove it, and almost the whole of it was taken away, a small portion remaining, and not until puberty did this show itself, when it commenced to enlarge. Mr. Hewett punctured it, and removed much fluid. A seton was then passed through it. Great inflammation followed, and much matter was formed, with bad constitutional symptoms. After driving out one day, she vomited a pint of matter, and ultimately completely recovered, having been well ever since. It was possible that if any small piece were left in the first operation, reappearance would take place.

Mr. HULKE read a report on a case by Dr. J. Pollock of Ovarian Tumour. Mr. Hulke likened the formation of the tumour to that of adenoid tumour in the neighbourhood of other glands, as described by Rokitansky.

Mr. HOLMES showed a specimen of Perforating Wound of the Cranium for Mr. Branston Nash, of Liverpool.

Mr. HICKS exhibited a specimen of

ANEURISM OF THE ARCH OF THE AORTA,

presenting externally, of thirteen years' duration. The patient died with renal disease, of causes unconnected with the aneurism. There was a good deal of clot in the aneurism, and there also existed aneurism of the descending aorta, entirely filled with coagulum. All the heart valves were healthy.

Dr. BRISTOWE and Dr. PEACOCK mentioned that there were difficulties during life in the diagnosis, and the latter said that during the patient's life there was no evidence of any incompetence of the aortic valves.

Mr. CURLING exhibited a Femur from a child six years of age, diseased in consequence of an accident a year before, and for which amputation at the hip joint was performed. Much difficulty was experienced in the diagnosis. The operation proved fatal after about a month, the stump having in the interval nearly healed. The bone was found extensively necrosed at the upper part; the head and neck quite absorbed; the acetabulum slightly carious. At the time of the operation a small portion of loose bone was removed, which was, no doubt, the vestige of the head.

Mr. CURLING showed a specimen of Rupture of the Rectus Abdominis Muscle in Acute Tetanus.

Mr. BRISTOWE and Mr. W. ADAMS referred to cases in which the rectus abdominis muscle and other muscles also had been found ruptured in other cases not tetanic.

The PRESIDENT mentioned that the same phenomenon had been seen at St. George's Hospital many years ago in several cases of an epidemic form.

Mr. LITTLE showed a portion of an

ENCEPHALOID TUMOUR OF THE TESTICLE,

in which cancerous matter was detected by the microscope in the tubes found spread around the tumour.

The PRESIDENT related a case showing the difficulty of distinguishing malignant from non-malignant disease of the testicle by the microscope and by the naked eye in doubtful cases.

Dr. PEACOCK exhibited a Dissecting Aneurism of the Arch of the Aorta which had burst into the pericardium.

Dr. PEACOCK also showed a Spina Bifida for Mr. Hacon.

Mr. NUNN exhibited a specimen of

CONTRACTION OF THE RECTUM, COMPLICATED WITH FATTY GROWTHS AROUND THE GUT.

The contraction appeared to depend on the presence of a large mass of fat growing in the pelvis. In this case also the right ovary was absent, and the left Fallopian tube was enlarged and dropsical.

Mr. SYDNEY JONES referred to a preparation in the museum of St. Thomas's Hospital, in which the presence of a large mass of fat had also produced pressure on the rectum.

MORBUS ADDISONII.

Dr. WILKS said these organs presented the usual appearances seen in morbus Addisonii, and came from a young woman who was under Dr. Wilks's care in Guy's Hospital, and who presented a model case of the disease. She was twenty-three years of age, and for two years had suffered from discoloration of the skin, debility, some wasting, and occasional sickness. The sickness being at times worse, she sought the advice of medical men; she had seen several, and they all considered the case as one of liver disease. This mistake, Dr. Wilks said, should not have been made, seeing that her eye was not yellow, nor her urine jaundiced. When she came to the hospital, her skin was of a greenish-brown colour, like that of a native of the south of Europe. She did not appear very ill, judging from her expression; but was so weak that she was obliged to be carried to bed. She also had sickness; the latter abated, and she felt much better, so that indeed she was the merriest person in the ward. She was, however, at this time so feeble that she could not sit up in bed, and her pulse was like a thread. Wishing to leave the hospital at Christmas time, she went home, Dr. Wilks requesting that he should be informed when she became worse. Only a few days elapsed when he was sent for, and found her in a dying state. She was quite sensible, and was able to speak, but was utterly powerless, and her pulse could not be felt. She had been lying in this state for twenty-four hours, and in the course of the night she died. Dr. Wilks said the case was so marked that he invited several medical men to see it, and took one of her medical attendants with him to perform the post-mortem examination. No disease was found in any part of the body, except the supra-renal capsules, which were converted into a yellow amorphous material, with some cretaceous deposit. Dr. Wilks remarked that several attempts had been made to elucidate the subject of Addison's disease by an examination of the supra-renal bodies under all circumstances. He had done this for many years himself, and, like Professor Malter, of Siena, his observations had been unattended with success. The reason seemed to be, that if affected, except by the special disorder, they were only partially or quickly involved in some disease which infected the whole body, as cancer or tubercle; whereas in morbus Addisonii the change was a primary one, and altogether independent, pursuing its course for several years, and probably totally destroying the organ a long time before death. It was for this reason that the author of the discovery did not look upon the supra-renal capsule as a vital organ, but which, when diseased, produced the remarkable asthenia by implication of the centres of the ganglionic system, which were closely contiguous.

Dr. Wilks also exhibited some supra-renal capsules, affected in a similar manner, which had been sent to him by Dr. Hardwick, of Leeds (since deceased). The patient was a man twenty-nine years of age. For some months he had pain in the back and leg, and about nine months before his death his companions noticed his skin becoming yellow, and they thought he was going to have jaundice. He got weaker, and the skin became darker; the urine was always pale. He improved a little under treatment, when he had an epileptic fit; and subsequently vomiting came on, and slight convulsive movements. He was then so feeble that he was obliged to be carried to the infirmary. His body was of a dirty olive-brown tint, giving him a close resemblance to a mulatto. He also had a psoas and lumbar abscess. His depression gradually increased until death. There was found disease of the lumbar vertebræ, and the supra-renal capsules were converted into a dense, tough, fibrous mass, with some cheesy tuberculous matter.

Dr. Hardwick stated in his communication that since he had been connected with the Leeds Infirmary he had seen four other cases of morbus Addisonii, besides the one just related. In two of them, although the symptoms were well marked, the cases were not followed to their termination.

Of the other two, one was that of a man fifty-two years of age, who had long suffered from great prostration and discoloration of the skin. Death occurred by gradual sinking. No disease was found except in the capsules, which were converted into a grey lardaceous material.

The other case was that of a woman aged sixty-nine, who had great prostration, frequent vomiting, and whose skin was of a dark-brown colour throughout. No disease existed except in the capsules, which were filled with a mass of grey and yellow soft cheesy deposit. She was a patient of Mr. Hall.

Dr. HARLEY said he thought the Society would not have heard anything more of Addison's disease: it was a subject exploded. No man of celebrity on the Continent believed in it. A professor lately writing to him had asked whether that ephemeral disease of Addison was still talked of in England.

Dr. WILKS said that the time of the Society would not allow him to go over again the same arguments which had been before them so often on previous occasions; but he was perfectly astonished at the remarks of Dr. Harley. He had framed to himself a number of difficulties which did not exist. Addison's statements had been verified, to Dr. Wilks's knowledge, at least fifty times; and if this was not sufficient proof of their truth, he had no more to say. To anyone who chose to look at the matter fairly, the evidence in its favour was overwhelming. He would like to know by what method, except by a legitimate scientific one, it could be foretold that a patient under observation for months or years had a disease in a certain part of his body. The sceptics were those who had not seen the disease, and did not choose to adopt other persons' observations.

Dr. RISDON BENNETT showed a case in which one supra-renal capsule was destroyed by hydatid disease.

Reviews and Notices of Books.

On the Diseases of Women. By FLEETWOOD CHURCHILL, M.D., &c. Fifth edition, carefully revised and enlarged. Fcap. 8vo, pp. 937. London: Longman & Co. Dublin: Fannin & Co.

WHEN a book has reached the fifth edition, it is generally considered that little remains for the critic to do beyond noticing the fact. We shall therefore only venture upon a few short observations, in the hope that the sixth edition of the work may prove more deserving of unqualified praise than is the present issue.

To begin with, the book is now unnecessarily and inconveniently large. It is unnecessarily so, because long quotations and cases are given from writings some fifteen or twenty or more years old, when the pith of the author's observations might be stated in a very few lines. Moreover, there is a very useless parade of references, occupying much space. Then, again, the proper matter of the work occupies 548 pages; but we have nearly 400 additional pages devoted to the Diseases of Pregnancy and the Diseases of Childbed. Whether this volume is the fitting place for these topics we need not stop to discuss; but with regard to the latter subject it seems most unnecessary for Dr. Churchill to print again that which has already been given to the medical world in his work on Midwifery.

With regard to some of the matter, it is all that could be desired; but there is much also that needs correction. Indeed some of the chapters, instead of being reprinted from the last edition, ought to have been rewritten. In the section on the Management of Women in Childbed, we find directions given that no one but a monthly nurse would think of following. Are we still so unmindful of observations that have been made all over the world as to believe that "the patient should never leave her bed, even to have it made, before the eighth or ninth day"? Or, again, that "she should be confined to slops—gruel, panada, arrowroot, milk, whey, weak tea, &c.,—with bread or toast and butter, or biscuit, for five or six days"? No wonder that we find laymen holding up the whole body of accoucheurs to ridicule when the simple and natural process of labour is regarded with such fear and distrust by the doctor. And no wonder that cases of uterine inflammation and phleg-

masia dolens are met with, when so much care is taken to impoverish the blood and weaken the nervous system.

In the same spirit as the foregoing we find vaginal injections of warm *milk*-and-water advised for the relief of pruritus of the vulva. (pp. 55, 56.) This is simply one of the remnants of barbarism; of the time when the various parts of animals or their excretions were employed in medicine. But just as the use of urine and milk to inflamed eyes has long since been laughed at, so we cannot but regard Dr. Churchill's formula as useless, and therefore injudicious.

The misprints are numerous. Thus, amongst many others, we have—"Pallas, Linnæus, and Percy *calls* them." (p. 282.) "Her constitution was breaking down, without hope or help from medicine or surgery." (p. 80.) "It" (urethritis) "may be acute or chronic according to the time we are called in." (p. 81.) "The rigidity and persistence of the hymen *is* mentioned." (p. 97.) "The probabilities of cure *has* been." (p. 120.) "The *diagnosis* is seldom difficult. We may expect this to be the case when we find the orifice of the vagina," &c. (p. 127.) "A recent writer has enumerated among the symptoms or consequences of leucorrhœa, disturbance of the menstrual functions, generally *its* too frequent recurrence, and is at a loss to explain them. If he had not rejected the distinction between uterine and vaginal leucorrhœa, he would have been at no loss to do so," &c. (p. 133.) "The causes (*say* Dr. Locock) of this condition." (p. 190.) "Subsequently a binder must be applied, and the patient managed as after ordinary labour, but special reference to the flooding." (p. 288.) "Professor Dubois denies that *these* displacements ordinarily lead to the consequences which have been attributed to *it*." (p. 411.)

There are many other passages which we had marked for notice—some for approval, some for censure; but it is unnecessary to say more. Few men should be better able, from their own experience, to write a good book on the Diseases of Women than Dr. Churchill; but to produce a really useful work, fully up to the knowledge existing at the time of going to press, he must exercise more patience and judgment, and give more real labour to his task than he seems to have done in preparing this new edition.

The Principles and Methods of Medical Observation and Research. For the Use of Advanced Students and Junior Practitioners. Second Edition, with Copious Nosologies and Indices of Fevers, and of Constitutional Cutaneous, Nervous, and Mental Diseases. By THOMAS LAYCOCK, M.D., F.R.S.E., F.R.C.P., Professor of the Practice of Medicine in the University of Edinburgh, &c. &c. pp. 403. Edinburgh: Maclachlan and Stewart. London: Simpkin, Marshall, and Co.

THE fact that a book has reached a second edition may be taken as a proof of important merits and uses. The praise of the public implied in the purchase of a first edition leaves the reviewer little else to do than to point out faults. It is clearly desirable that students should read once for all a good statement of "The Principles and Methods of Medical Observation and Research;" and thanks are due to Professor Laycock for conceiving and carrying out such a statement. We think, however, it has several faults. It is tediously long and diffuse in consequence of a redundant verbosity and an unnecessary amplification of much that is obvious and well understood. It is got up too expensively for a student's book, with backs and margins rather becoming the drawing-room than the study—an evil, by the way, which is becoming very common.

The author, in the Preface, calls particular attention to an entirely new Part, containing the nosologies of several important groups of diseases. We do not see the perfect appropriateness of a nosology in such a book. Besides which, this particular nosology is so elaborate and exhaustive, so intricate, not to say confused, that either to be led by it, or not misled, would require a detailed knowledge of pathology and other nosologies such as can scarcely be expected of a student. As to the information conveyed in it, it is too fragmentary to be of use; and as to the mental exercise implied in following out the terminology of it, this would be rather a lexicographical surfeit than a beneficial act of medical training. With these qualifications we commend the book to advanced students and junior practitioners.

THE FATALITY OF FROST.

To the Editor of THE LANCET.

SIR,—I read with much interest an article which appeared in your journal of Jan. 23rd, on the "Fatality of Frost." As I am still sceptical on that subject to a great extent, permit me to make a few additional observations. In large towns and cities like London, where the streets, even in intensely cold weather, are damp under foot, in consequence of the immense amount of traffic along the pavements, affections of the chest increase, and so evidently does the mortality, according to the Registrar-General's reports. But in country districts, where the roads and streets remain perfectly dry under foot, diseases of the chest do not increase, and the mortality during the continuation of severe frost actually diminishes. In December, 1860, having charge of an extensive country union and private practice, I enjoyed during the intense frost a fortnight or so of recreation with my friends in the neighbourhood; whereas previously we were busily employed. The mortality in a town of three thousand inhabitants was reduced to one, and that one was an old person whose demise had been expected some time before. The ground was covered with snow in a crisp frozen state, yet few thought of wearing flannel under-clothing. In about a fortnight after the commencement of the thaw sickness and mortality rapidly increased, and we had as much work as we could manage. The healthy state of the neighbourhood during the continuation of the frost was so striking, that our learned and highly respected pastor, in preaching the funeral sermon of the aged person already mentioned, commented at length on the fact, and he particularly drew attention to the low rate of mortality.

From personal experience I know that damp feet cause pectoral complaints, but I question whether mere cold has much influence in doing so. At all events, moisture is the great enemy. It is well known that a man may pass from a dry heated room into a cold dry place without any danger whatever; but when moisture is introduced it alters the question. In 1860, during the frost, I did not feel the want of flannel under-clothing, although I am subject to bronchitis at times. I am more afraid of damp feet than anything else. Even many elderly persons have not required any extra clothing this winter, in spite of the sharp frost. I have not worn any flannel or extra clothing excepting a top-coat this winter, although I frequently went from near a large fire directly into the cold air, merely putting on my over-coat. I have for many years noticed that in dry, calm, very frosty weather my work has always been lessened; whereas, whenever there is moisture, whether it be winter or summer, sickness always increases proportionately. In very frosty weather the air is usually still, and people in health do not require much extra clothing; but during stormy weather, especially in travelling against the wind, people become much more susceptible to catarrh and chest complaints, and extra (flannel) clothing to protect the chest should then be worn. When flannel is once had recourse to it cannot be left off with impunity. I quite agree with you as regards your benevolent remarks in sympathy with the poor at this time of the year. The thaw, in my humble opinion, has much more to do with the increase of sickness than our welcome Christmas frost.

I am, Sir, yours very obediently,

Liverpool, Jan. 1864. S. W. SMITH, M.D.

CHLOROFORM.—Professor Nussbaum has succeeded in prolonging the anæsthesia induced by chloroform, by the subcutaneous injection of a solution containing one grain of acetate of morphia. In one case the patient slept twelve hours, and underwent a painful operation without experiencing any sensation whatever. The injection performed without the previous inhalation of chloroform produced no such effect.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 13, 1864.

IN a speech, remarkable for clearness and precision, Sir GEORGE GREY has introduced his promised Bill to amend the Act 3 and 4 WILLIAM IV., cap. 54, relating to the care and treatment of criminal lunatics. The facts which led to the respite of TOWNLEY and the subsequent commutation of his sentence have been therein calmly stated. We commend Sir GEORGE GREY'S account of the several circumstances which influenced his decision to the perusal of all who have entertained views different from those we have expressed on this important trial. It has never been asserted that, within the legal definition of what constitutes responsibility, this wretched prisoner had been wrongly convicted. He knew that killing a person was contrary to law; he also knew that the penalty attaching to such an offence was death by hanging. This was expressly stated by Dr. WINSLOW upon the trial, and confirmed by the other medical witnesses examined on TOWNLEY'S behalf. Notwithstanding this avowal Mr. Baron MARTIN, who tried the case, felt it to be his duty to communicate with Sir GEO. GREY and to forward to him a copy of his notes of the evidence which bore on the mental condition of the prisoner, at the same time expressing his opinion that the conviction was right. Sir GEORGE GREY read the evidence, and intimated to the learned judge that it did not impress him to the same extent as indicating the prisoner's insanity. A further correspondence induced Mr. Baron MARTIN to declare, while leaving the medical evidence an open question, "I certainly think, and have thought ever since the trial, that there ought to be further inquiry." Accordingly Sir GEORGE GREY directed three commissions in lunacy, Mr. CAMPBELL, Mr. WILKES, and Mr. FOSTER, to proceed to Derby. These gentlemen, it must be presumed, were selected for this most important duty because of their known competency and experience. They appear to have exercised every caution in the conduct of the inquiry, and to have very carefully considered their judgment before its publication. Sir GEORGE GREY thus expresses the conclusion at which they arrived: "The lunacy commissioners said, in effect, 'We do not consider this criminal to be of sound mind.' At the same time, according to the law of the land, he was responsible for his acts." The lunacy commissioners thus confirmed the medical opinions, and verified the eminent judge's view of the propriety of further inquiry. Their report opened a complex and difficult question—one which we have on previous occasions fully considered—as to the amount of "unsoundness of mind" which ought to prevent the extreme sentence of the law being carried into execution. We are not surprised to find Sir GEORGE GREY declaring, "This report placed me in a painful position. On such a report alone I should not have felt justified in interfering to prevent the law from taking its course." On such a report Sir GEORGE GREY would have been obliged to violate the principles of English law and to sacrifice its intention to the technicalities of its letter. He well knows what the spirit of our happy Constitution is. In quoting BLACKSTONE in reference to the humanity of the English law, and in recurring to the statute of HENRY, and that of PHILIP and MARY, as bearing on the execution of the insane, at the same time repeating the observations of Sir EDWARD COKE in reference to these statutes, Sir GEORGE GREY best informed the House of his reasons for causing the further inquiry to be instituted. It has been our privilege to previously direct attention to a view of TOWNLEY'S case, based on those statutes and opinions quoted by Sir GEORGE GREY. We would have desired that with the commission then instituted the matter had been allowed to rest, and that the Home Secretary had felt it consistent with "a discharge of his duty towards the public, as well as satisfying to his own conscience," to have given practical expression to the observations of Sir EDWARD COKE, and to have considered that in a case of "unsound mind" the extreme penalty of the law should not be permitted to take effect. He declares, however, that he would not have done so, and thereby realizes the class of cases referred to by Mr. Justice MAULE in his separate opinion in reference to the points submitted to the judges subsequent to the trial of M'NAUGHTEN; and also verifies the apprehensions entertained by Lord LYNDHURST, that the adoption of a fixed standard, or universal rule or declaration of law, in the matter would be productive of results little consonant with the dictates of humanity, should juries be obliged to adhere to a precise rule, or the judges adopt an unbending precedent. An accident prevented Sir G. GREY, in his then state of mind, from doing violence to his feelings, inasmuch as the provisions of a special statute were put in force, through the interference of the prisoner's attorney, which caused an interruption of the sentence the Home Secretary had intended to carry out. Mr. LEECH, the attorney for TOWNLEY, has published a letter setting forth his conduct on the occasion. The tone and spirit of that communication cannot be too highly commended. Sir G. GREY, we are glad to perceive, not only "imputes no blame to the prisoner's attorney for taking such a course as long as the law sanctioned it," but even implies that he acted rightly "in using every effort to save the life of his client." Having no discretion under the provisions of the Statute 3 and 4 WM. IV., c. 54, Sir G. GREY granted a respite, and, pursuant to the directions of that statute, the prisoner was removed from the jail to an asylum. It was then affirmed that an informal certificate had been acted upon. In order to satisfy himself that, in the event of such being the case, no injustice had been done, a new commission was directed, and the inquiry as to the prisoner's soundness of mind reopened. He was at the time an inmate of Bethlehem. For this purpose, Drs. HOOD, BUCKNILL, MEYER, and HELPS were appointed. They received directions similar to those of the previous commission, and on the important question of the soundness of mind of the prisoner arrived at a result precisely opposite to that expressed by their predecessors. In this complication what was to be done? The certificate on which the prisoner's removal had been effected was, however obtained, but a confirmation of the report of the commission. The commissioners were in direct antagonism. Who was to affirm that, had a third commission been instituted, an intermediate result would not have been accomplished! On ordinary trials, where doubt exists, the prisoner is entitled to the benefit of it. When competent and eminent authorities thus differed as to the prisoner's sanity, on what ground can it be argued that his life should not have been spared, except that for the form of "unsoundness of

mind" to which the original commission certified the law had made no provision? Who will undertake to indicate the ratio between soundness of mind and crime if once they accept the doubts of Mr. Justice MAULE or the arguments of Lord LYNDHURST? The moment an exception, such as these eminent judges foresaw, is admitted, the case is resolved into one for special inquiry, and where that eventuates in a direct conflict of the highest authorities, not on the responsibility but the sanity of the accused, we again affirm that the prisoner, so far as the carrying out the extreme penalty of the law is concerned, was entitled to its benefit. There was no denying the finding of the lunacy commissioners that he was "of unsound mind," which, backed by the necessary certificate, ensured his admission to the asylum. The Act prevented his removal therefrom unless "it was duly certified to one of her MAJESTY'S Principal Secretaries of State by two physicians or surgeons that the prisoner *had become* of sound mind," so that the commissioners, on whose certificate he is ordered from the asylum, are obliged to allege his recovery from a condition of mind they declare at no time had existence. Is it matter for astonishment that, in this serious conflict of fact and law, of opinions and principles, the Lord Chancellor, whose ability no one will question, should have determined "that under the circumstances of the case, after TOWNLEY had been respited under the certificate, after he had been removed, *and after the doubt which had existed as to his sanity*, it would not be right to carry the capital sentence into execution." While fully agreeing in the conclusion, we cannot but regret that in this as in other cases where the question of insanity has arisen, so wide and apparently inexplicable a difference of opinion should prevail; for it has not been asserted, nor would it be believed, that the original commissioners who, a few weeks, or rather days, previous to the last report had stated their opinions, were not able, competent, and honourable men.

The most important part of Sir GEORGE GREY'S speech was that which directed attention to the proposed changes in the 3 and 4 WM. IV., c. 54, which, it is alleged, was on the present occasion unduly put in force on TOWNLEY'S behalf. While securing proper provision for the care and disposal of criminal lunatics, who, without doubt, ought be removed to an asylum, it is not proposed to limit the general operation of the Act. "It is clear," adds Sir GEORGE GREY, "that every prisoner, if lunatic, should be removed without making any distinction as to the nature of his crime." With a view to the discharge of the "delicate, difficult, and responsible duty" imposed, or empowered, by the Act, the privilege of certifying is limited to the visiting justices of the prison, as distinguished from any two justices of the peace. It is also proposed that the responsibility of selecting the medical men, whose signature is essential for the certificate, should rest with the visiting justices, the only provision being that the physician or surgeon called in for such a purpose shall be registered under the Medical Act. The last and most important provision is, "that the certificate of insanity so signed shall be no longer final or conclusive." "In the great majority of cases," adds Sir GEORGE GREY, "no doubt it will be final." But by the insertion of words showing that it is not mandatory but permissive, the Secretary of State, "if he thinks fit," will be able to institute further inquiries in any case before he directs the removal of the prisoner, so as to satisfy his mind, if he entertains any doubt, that the certificate is correct. These provisions are to their extent unexceptionable, but they still leave the initiative of such proceedings with the visiting justices. If we are rightly informed, in the case of the poor man CLARK, who was respited because of his insanity, (the case quoted by Sir GEORGE GREY,) the authorities of the prison wherein he was confined refused, or were unable, to take the steps necessary to establish his mental condition, and the Home Secretary had to exercise his authority and order his removal to another jail before he could be subjected to the requisite examination. If this be so, it is most desirable that there be a power vested in the Home Secretary to initiate every such inquiry. We know sufficient of official humanity to affirm that where there is a discretion it will be fairly exercised; and certainly in such important cases this discretion should be reserved. We have no remarks to offer or suggestions to urge against the proposed change beyond those which are dictated by the permission secured of reopening inquiries of this nature once solemnly concluded, until at least a sufficient period of time has elapsed as would account for any difference of opinion, without, as in the present instance, making human life the plaything of scientific subtletics or personal theories.

When the Bill comes on for a second reading, we trust that members will be found to advert to the differences between the actual medical tests of insanity and the legal standard of responsibility, and that some important amendments to the dogmas at present in operation will be carried, by which the victims of the most terrible of all afflictions will not, when suffering from the dispensations of Providence, be by reason thereof consigned to the scaffold.

FESTINIOG is a parish in North Wales. It has recently suffered from a severe epidemic of fever. Out of a population of six thousand, upwards of six hundred were seized with the malady. The locality had been exempt from an outbreak of like character for a period of twenty years. The attention of the Medical Department of the Privy Council was directed to an irruption of disease at once so unusual and widespread; and Dr. BUCHANAN, one of the physicians of the London Fever Hospital, was instructed by Mr. SIMON to investigate its origin and nature. His report on the outbreak is of considerable interest as touching certain vexed questions concerning the genesis of continued fevers.

The fever was typhoid. The cases seen by Dr. BUCHANAN differed in no respect from the ordinary type of this affection as witnessed in London. The disease was usually accompanied by diarrhœa, sometimes by hæmorrhage from the bowels, while some cases proved fatal by peritonitis. Rose-spots were found in all the cases examined by Dr. BUCHANAN during the second and third weeks of the fever. The duration of the illness was long, the convalescence protracted, but the mortality was small. Young people suffered especially, and many children were attacked. The number of deaths from the malady was sixty-seven, representing a rate of ten per cent., or thereabouts, of the presumed number of attacks; and it is believed that the mortality was even lower than this. Owing to a prejudice existing in the district against post-mortem examinations, no observations were made on the state of the organs after death.

Typhoid fever had existed in the Festiniog Union during the whole of 1863, and it prevailed more especially after the month of June. The epidemic was not general. It affected almost

exclusively that part of the parish which lies amongst the mountains to the north of Festiniog village. The villages of Bethania, Tanygrision, and Glanypwll, inhabited by labourers in the adjacent slate-quarries, suffered most. The fever prevailed chiefly amongst these labourers and their families. The class of paupers did not suffer in any marked degree; but the quarrymen live so fully up to their income that they are pauperized by the occurrence of sickness, and more than one-half of the fever-stricken received medical assistance from the parish.

The disease is said to have differed from ordinary typhoid fever in being very contagious, but the evidence in favour of this view is far from conclusive. The arguments adduced are four. First, this was the local belief. Secondly, many of the persons hired to attend the sick at their own homes contracted the fever. Thirdly, one person after another was attacked in the same house; and lastly, this phenomenon was less frequent when the first case was removed to hospital. The first argument has no weight; the second and third statements are equally explicable on the view that the fever had a local origin. For the last argument to be of any value it is necessary that the facts and circumstances of each case should have been carefully investigated. There is no fact to show that the fever was propagated by the sick in localities before free from it, and, indeed, the experience of the hospital is opposed to any such idea.

The infected villages are situated on the sides or at the foot of mountains where the air is pure and the natural drainage good. The water for domestic use is derived partly from a stream in the valley contiguous to the villages, and partly from wells. The water of the stream is exposed to constant contamination; but the people state positively, and with remarkable accord, that this water was never under any circumstances employed for drinking. Dr. BUCHANAN, however, is not disposed to accept this statement unhesitatingly. He remarks that, if two sorts of water are admitted to a house, it is difficult to feel sure that a strict separation would be made in their use; and, indeed, he saw reason to believe that the water of the stream was occasionally used for drinking. Water for internal use is mainly obtained from wells in the mountain side, presumably situated above any possible source of pollution. At Bethania only was there much reason to conclude that well-water had been contaminated by drainage. Certain wells, it would however appear, are below the level of adjacent houses, for, on the advice of a local practitioner, the people ceased to drink the water of wells so placed.

The houses usually have sufficient space around them. They stand singly, in pairs, or in rows; but only here and there do they form streets. The great majority have no ashpits or privies attached to them, and the inhabitants have not access to places of this sort. The custom of the inhabitants is to retire to the fields, or to make use of chamber utensils, which are emptied a little distance from the houses. Houses in a row are generally provided with one or more privies common to the row. These privies are often in an offensive condition, and many of them drain into the neighbouring stream.

The paving about the houses is usually pretty good, so that rain readily washes away filth, defiling, as Dr. BUCHANAN points out, the stream. The rainfall in the Festiniog district during the autumn of last year was unusual. Dr. BUCHANAN suggests that the greater pollution of the stream thus arising might account for the peculiar prevalence of typhoid at that time, were it not for the asserted little use of running water for drinking, and for the fact that typhoid is commonly less prevalent in a wet autumn.

In a hamlet above Tanygrision, where the houses are well drained and ventilated, and each house has a privy some six or seven yards distant at the back, there was little fever, and none of a severe character.

The houses in the infected villages were for the most part cleanly, more so than might be supposed when the number of inmates is considered. Cases of fever were more severe in cottages which were habitually dirty.

The condition of the houses which attracted chief attention was their overcrowding. The number of labourers employed in the quarries within the last two years has largely increased. There had not been any proportionate increase of house accomodation in the immediate vicinity. As a consequence, every house was crowded to excess. Dr. BUCHANAN gives the following examples of the state of overcrowding which existed:—

"There is a row of cottages at Glanypwll, called Treddoll, each of which consists of a good-sized day-room, a sort of cellar, and a bed-room on the ground level; and of an upper bed-room, or loft, approached by a ladder from the day-room. The dimensions of the lower bed-room are about 8 ft. by 6 ft. superficial, and 5½ ft. high. It can, of course, only contain one bed; the lower sash of the window opens, but can only be kept open by a prop. The loft measures about 12 by 6 ft. superficial, and its roof (sloping from about 2½ ft. at the wall to 6½ ft. in the middle) has an average height of about 4½ ft. In this loft are two or even three beds. Light is admitted by one pane of glass replacing a slate in the roof; there is no opening for air except the door into the day-room. The cubic capacity of the lower bed-room is, therefore, under 300 cubic feet, and of the upper sleeping room under 350 cubic feet. Now, in one cottage of Treddoll ten people sleep at night—five of the family and five lodgers. Three lodgers sleep in the lower room; the family and two lodgers in the loft. There has been one case of fever here. In another of the cottages twelve people have slept by night in the two rooms. A man, his wife, two grown sons, a daughter of eleven years, and three lodgers occupied the upper room. A married daughter, her husband, and two daughters slept down stairs. In this house there were six cases of fever, and one child died of it. And so on for other houses of that row.

"But the whole tale of overcrowding in the slate villages is not even yet told. The quarry labourers work by relays, some by day, others by night. As a day worker leaves his bed in the morning, he makes room for a night worker who has just returned home. Reeking with his labour, with no change of clothes, and latterly almost always wet through with rain, this man takes his portion of bed, and his fifty cubic feet of air, hot as they have been left by his fellow."

Some of the labourers slept in a sort of barracks at the quarries; there the overcrowding was not so great. The fever was most prevalent in the crowded houses; few cases occurred in the barracks.

The population as a whole was sufficiently fed. Their chief diet consists of bread, butter and skim cheese, with potatoes occasionally. Meat is usually eaten once a week. The drink is generally tea, and the workers get beer. As a rule, the latter are temperate.

The chief interest of this outbreak of typhoid rests in the influence which overcrowding exercised in its development. No fact is better established than the indifference of this dis-

ease to overcrowding and deficient ventilation: these conditions are not necessary to the prevalence of typhoid. But at the same time there is no doubt that overcrowding and deficient ventilation may favour the propagation of the fever. In the Festiniog epidemic overcrowding would appear to have been the chief predisposing cause of the outbreak. For the rest, the history is somewhat obscure. It leaves us in doubt as to the probable influence of those causes which we are accustomed to think most potent in exciting typhoid. Doubt rests on the integrity of the drinking-water. The running stream from which the villagers draw supplies was avowedly and of necessity polluted with fæcal matter; the water from the wells was only presumably pure. We cannot repose faith in the purity of any wells, however distant from habitations, where the population to ease labouring nature are accustomed to frequent the hill-sides and meads. We know from experience how the drawing of water and the solacement of natural wants are, by such a population, with Arcadian simplicity, often pursued for convenience sake at one and the same time. It is impossible to get rid of a vision of each retired well encircled with its Malebolge. Under such circumstances, the greater the rain, the greater the risk of pollution. It is not stated where the quarrymen, when at work, eased themselves; neither do we learn from Dr. BUCHANAN'S report the position of the quarries in relation to the wells. Again, doubt rests on the degree of atmospheric pollution from stercoraceous matter. The normal condition of the surface soil in the immediate vicinity of the houses and in the precincts of the village was that of a diffused cesspool. While the heavy and prolonged rains would cleanse largely the surface, to the detriment of the stream and wells, they would doubtless lead to a much greater use of chamber utensils, and consequent greater, graver, and probably exceptional, pollution of the atmosphere in-doors with fæcal emanations, and of the soil immediately contiguous to the houses with fæcal matter. It is true that a rainy autumn is often characterized by an unusually small prevalence of typhoid fever in towns, because the rain keeps the drains constantly flushed; but a large rainfall, under other circumstances, may operate very differently. The Arcadian does not care to take his burden to the fields, but hugs the shelter of his domicile, in rainy weather; while the common chamber receptacle of the family is not unfrequently only cleansed as occasion requires. It is important to note that the dejections of the typhoid patients would be cast out near the houses, and thus might play an important part (particularly if the apparently slow development of the epidemic is considered) in the spread of the disease.

We see nothing in Dr. BUCHANAN'S report to alter the prevailing opinion as to the exciting cause of typhoid fever. Overcrowding played the part of a predisposing cause, as it has done in several instances already on record, favouring the propagation of the disease by preventing the diffusion and dilution of the poison. That it was not the essential cause is evident from the fever not being confined to the houses which were overcrowded.

It may be added that the local medical practitioners considered that exposure to cold and wet predisposed to the fever. During the wet autumn the clothes of the quarrymen were scarcely ever dry.

IT will be seen on reference to our Parliamentary column that Mr. M. GIBSON has obtained a Committee, consisting of members of both Houses of Parliament, to inquire into the best method of dealing with the various metropolitan railway schemes to be introduced during the present session. It is satisfactory to sanitary reformers that in the discussion which took place more than one speaker alluded to the prejudicial influence which railways in London have exerted upon the condition and health of the poor. Long ago we thought it our duty to direct attention to this important matter. We pointed out the evils which necessarily result to public health by the deprivation of proper house-room for the poor of this already overcrowded metropolis. The effect of the demolition by railways of houses in densely-populated neighbourhoods has been to make the overcrowding still more disastrous to the public health. Railways have destroyed the habitations of those whose positions in life would not enable them to move to a distance. No provision was made on the part of the railway companies to accommodate those whom they had dispossessed of house and home with a ruthless tyranny which has not yet been visited with that strong condemnation which it deserves. The removal of the houses of the poor in the metropolis has resulted, in certain instances, in a fearful aggregation of tenants in the immediate neighbourhood of the demolished dwellings. The consequence has been, not only a lamentable deterioration of the general health of the inhabitants, but the spread of fever and contagious diseases which baffles and almost sets at defiance the efforts of philanthropists to arrest. No wonder, then, that under such circumstances the "nightly refuges" of societies for the relief of destitution and the casual wards of the metropolitan workhouses should require increased assistance from the charitable public and the parochial authorities. In Bermondsey, where the destruction of house property has been something frightful, the law has been appealed to, to turn out the wretched inhabitants from dwellings which would disgrace a country less civilized and less humane than England. Poor creatures who are the subjects of this, perhaps, necessary severity, naturally resisted so cruel a proceeding. Bad as their homes were, those to which they must have resorted would have been worse. And yet the Legislature had made no provision for this most obvious and painful alternative. Mr. CRAWFORD, one of the members for the City of London, related, in the discussion on Mr. GIBSON'S motion, an instance which seemed to attract the attention of the members of the House of Commons. A magistrate was applied to for powers, on the part of a company, to evict a poor woman and her children from a dwelling which they occupied. The result was not stated. Whether they were turned into the street, or had to seek refuge in a workhouse, remains yet to be told. At all events the railway company, no doubt, acted strictly on the stringent powers which had been granted them by an Act of Parliament. It was, probably, a matter of perfect indifference to them what became of the widow and the children. It may possibly be difficult to suggest a remedy for such an outrage upon humanity; that such outrage does exist is no longer a question. The promoters of railway schemes in London are frequently mere adventurers, often without any object in view except that of carrying out their schemes for the aggrandizement of engineers, lawyers, and Parliamentary agents. They bring before Parliament Bills which profess to have a public object, whilst in reality they are often absurd

and mischievous. It is vain to expect that the metropolis can ever be improved as a place of residence, which it must always be to a vast number, if railway companies are permitted to exercise their baneful influence without a check and without remonstrance. The inhabitants of London naturally look in this emergency to the Metropolitan Board of Works. To that body great powers have been given, and enormous taxation has been levied by them for the sole purpose of improving London in its sanitary aspect. We believe that the Board is actuated by a sincere desire to faithfully execute their trust. If they do their duty they will resist the formation of unnecessary railways; they will preserve to us our open spaces; they will assist, at least, in the formation of new streets, and in the protection of that efficient system of sewerage which is now, under their auspices, nearly completed. If the *salus populi* be the *suprema lex*, we shall look to them for that protection which the Legislature may not have given, and which the railway companies have so unscrupulously and so unrighteously ignored.

Medical Annotations.

"Ne quid nimis."

THE DRUGGISTS AND THE NEW MEDICAL BILL.

THE provisions of the Medical Amendment Bill which was brought up by a committee for the consideration of the Medical Council have created considerable excitement amongst the large and influential body of dispensing chemists and druggists. Three classes of persons interested in pharmacy have been especially alarmed: those who are interested in secret remedies, those embarked in counter-practice, and those generally who dispense by their own leave and licence and are not members of the Pharmaceutical Society. The first, because secret remedies are attacked, and the protection of the Government stamp is removed; the second, because that mode of poisoning which is called counter-practice is limited and restrained; the third, because it is proposed to require an educational standard for those who deal with drugs and poisons, whose business it is to interpret prescriptions, to conduct chemical operations, to combine potent substances, to prepare important medicinal substances, and who are yet in a great number of cases destitute of the qualities which such avocations require, and whom the public could never trust without fear and trembling if they knew how deficient they sometimes are in elementary information. A great deal of this alarm is premature, for no such Bill can be said to have any present existence, as it is only vaguely contemplated; the Bill was brought up in a somewhat crude form, but it was recommitted, and has never actually been even under the consideration of the Council. Nevertheless such things as we have hinted at are undoubtedly contemplated; and in the abstract we must confess that our sympathies go with the innovations. But from the abstract to the real there is a chasm; and much will have to be done before it can be spanned in this particular case. The chemists and druggists have everything to gain by a satisfactory legal organization of their body. The Pharmaceutical Society has rendered service which cannot be over-estimated, in educating and disciplining a large number of their body. Its diploma is a title of efficiency; it has raised the status of the whole trade, and, what is more, it has increased its power and usefulness. Both the medical profession and the public are largely indebted to the late Jacob Bell, the founder of that Society, for the benefits which it has conferred. But it does not fully represent the whole body of the chemists; outside the pale of the Society are a great mass of persons, some highly educated, some indifferently, and very many not at all; some capable, skilful, and well-established dispensers; some assistant-chandler-shopkeepers, who combine "general stores" with bad drugs. The safety and well-being of the public, and the honour and respectability of all concerned, continue to call for some more perfect organization of the whole class of dispensers. It must be on the basis of a recognition of the rights of existing druggists who have any serious claim to the title; it must also obviously lead them to gather round the Pharmaceutical Society, which has now a corporate and legal position of the most solid character, and a well-established reputation as an educational institution, whose diplomas are coveted. Within these limits a plan might, we think, be devised which would meet the views of the great majority of chemists, pharmaceutical and non-pharmaceutical, and which would also satisfy the medical profession and the public that some guarantee of fitness might in future be obtained.

THE CRAWLEY COURT-MARTIAL AND SURGEON TURNBULL.

THE military history of this case seems now to be completed in the worst spirit of Horse Guards' tyranny and oppression. Dr. Turnbull has, we observe, been placed on half-pay. It might be thought that some reparation was due to him for the cruel harshness with which he was referred to in the memorandum of the Commander-in-Chief in respect of an accusation which had not then been officially investigated, but which was set forth as peculiarly disgraceful, and which was publicly recited in that most widely circulated document as an offence of singularly flagrant and dishonourable character. We all know the consequences of the solemn enunciation of such a charge in a document of this authority and notoriety; and how surely it was inferred by the majority of the readers of that memorandum—that is to say, by nearly every Englishman—that there were the most well-founded reasons for considering that Dr. Turnbull had been guilty of what amounted to forgery and conspiracy of a bad character. The imputation was no less; and it was made, as it were, deliberately, though irrelevantly, after weeks had passed, and when a few hours would have sufficed to ascertain the accuracy or inaccuracy of the charge. Within twenty-four hours of its publication, a board which was assembled on the very day the announcement was made declared that it was false. It cleared Dr. Turnbull of the charge of falsifying his books, and it established his honesty. It would have been difficult, by giving any degree of official publicity to this finding, to repair the wrong inflicted on one whom the language of the military code delights to honour with the title of officer and gentleman, but who is treated by the Horse Guards as though he were a slave, and without those real privileges which gentlemen may claim. We have waited in vain for any publication of that report through the same channels which were caused to convey the official imputation. We have waited in vain; and so, we venture to say, have the public and the profession at large. But all that we learn hitherto is that Dr. Turnbull has been punished by being placed on half-pay. We may hope that the character of that gentleman will not suffer seriously from this injustice. We made it our business to publish unofficially that finding which has thus far been officially suppressed. And that publication seems to have been so little palatable at head-quarters as to have excited curious inquiries in all sorts of wrong directions as to how the information reached us. As though secrecy should be desired in such a case; as though the first principles of honour did not dictate an open, ample, and immediate declaration of the finding, in the same authoritative and public manner that the false charge had been made. Fortunately the general organs of public opinion, quick to perceive the injustice which had been wrought, did something, by reporting the statement which we made, to remedy the injustice.

It is not the character of Dr. Turnbull which is any longer at stake; it was not solely his character or that of Colonel Crawley and his fellow-officers which has been on trial throughout, but the reputation of the Horse Guards for justice and for administrative ability. The palpable impropriety of the course which has been pursued towards Dr. Turnbull will damage that already feeble reputation. If there be any department which should be treated with consideration and courtesy, it is the medical department of the army. For undoubtedly it has fallen so low in the esteem of those who can alone replenish it, and it has suffered so much in the opinion of those who are in its ranks, that its efficiency is at a vanishing point. Three English candidates for ninety-five appointments was the state of things at the last competitive examination. And with half the number of candidates that there were vacancies, and the majority of these the sweepings of the schools, and passing in the lowest class, the time was ill-chosen further publicly to insult the department in the person of one of its members.

MODERN SUTTEEISM.

A HIGHLY interesting and important conference has taken place between the Lord Chamberlain and the different metropolitan theatrical managers, whom his Lordship specially convened for the purpose of discussing with him the best means to be adopted for preventing a recurrence of those terrible accidents which have recently on many occasions proved so disastrous. The several theatres were represented, and the combined experience of the different managers expressed on the question. While the necessity for some change in the existing mechanical arrangements for the purpose of stage lighting was admitted, it was deplored by all present that the young girls for whose protection steps were sought to be taken were themselves, in the great majority of instances, the chief cause of the catastrophes complained of, by neglecting to pay attention to directions which the public will be glad to learn are generally in all theatres posted behind the scenes for their guidance. It was stated that even the punishment of fines and threats of dismissal had failed to impress them with a due sense of caution. The managers certainly said enough to satisfy the Lord Chamberlain that, in accordance with the present mechanical arrangements, all due precaution is taken to guard against risk. As, however, the class chiefly endangered are young and thoughtless girls, this necessity for caution is not always borne in mind; as a consequence, rashness, or at least negligence, too often proves fatal. The Lord Chamberlain drew special attention to two sources of danger—foot-lights and inflammable dress; and impressed on the several managers present the desirability of taking some steps to remedy the dangers of the one, and to prevent the possibility of the other again occasioning such sad results; suggesting that, in case of a future death, with the many examples to warn them, a jury might make the managers responsible, and bring in a verdict of manslaughter against them. On this hint we doubt not action will be taken. In the present perfection of mechanical stage appliances, it seems ridiculous to suppose that a suitable protection could not be devised. We recommend the managers to look to it. We mistake much, if, in the event of an action at law being brought, unless it could be shown that managers had exercised proper and adequate care to prevent such catastrophes, they would not be held liable to damages—an event which would doubtless reduce to substantial practice those suggestions as to the safety of the stage which from competent quarters have been so abundantly offered.

The use of the solutions of tungstate of soda, which we have long and effectively pressed upon those concerned, was admitted to be a matter of the first importance; and we are glad to see that so many managers now admit the necessity for such means as to lead us to hope that all will be converted by the result of this discussion. A very curious practical difficulty was, however, alleged by the managers in explanation of the inefficiency of existing precautions. They could render the muslin incombustible, but their dominion did not extend to the underclothing. The underclothing of a ballet dancer is not usually of those ample dimensions which would lead us to anticipate the danger of its floating far from her body; but surely, if this be a real source of danger, the alleged difficulty is one just good enough to put off upon a Lord Chamberlain at a platform discussion, but not such as could baffle the arrangements of men seriously bent upon a humane purpose. The sway of managers is not so limited as they would suggest, and we are not to be persuaded that this responsibility can be so easily evaded.

A discussion was also raised respecting the means which the several theatres afforded to the public for speedy egress in the event of a fire during the performance. It is satisfactory to know that those several large houses which are each night so closely crowded are capable of being emptied in a comparatively insignificant space of time. We have no doubt, from the spirit in which these important matters have been taken up, that practical and substantial good will follow, especially as the Lord Chamberlain has so pointedly signified the possible consequence of a want of "due precaution" on the part of the management, which a jury may hold in the case of theatres, as they do in that of protection from machinery, to mean the lack of such a provision as shall secure from danger the rash or inexperienced.

HORSE ALLOWANCE TO SURGEONS IN THE ARMY.

A NEW WARRANT has been issued from the War Office regarding the allowance of forage to army officers, which will take away one of the grievances complained of by army surgeons. This new Warrant restores a provision which was made in one of the clauses of the Medical Warrant of 1858, but which was afterwards so modified as completely to amount to an infringement of that provision. It was originally defined that the relative rank of a medical officer should regulate the rate of forage he was to receive, or allowance in its stead—in other words, the number of horses he should be allowed to keep; but subsequently it was ordered that the forage or allowance was not to be given unless the medical officer could prove that his duties required him to keep a horse or horses. Now this limitation is again removed, and forage is to be granted to army surgeons of relative ranks with combatant officers to whom forage is allowed without reference to the nature of their duties. All medical officers, therefore, above the rank of assistant-surgeon, will now be entitled to forage, or an allowance in lieu of it; and assistant-surgeons will receive it when their duty renders it necessary to keep a horse for its proper performance. An inspector-general will be entitled to forage for three horses; a deputy inspector-general for two horses; and all surgeons-major and surgeons for one horse. When serving with an army in the field additional forage will be allowed. In Cavalry regiments the assistant-surgeon as well as the surgeon will be allowed forage for two horses.

The following clause regulates the allowance, when pay is given instead of forage in kind:—

"The allowance in money in lieu of forage to staff officers and officers of the Royal Artillery and Royal Engineers, and regiments of Infantry at home, shall be 1*s.* 10*d.* per ration, with an addition of 6*d.* a day when the horse is not provided with stabling belonging to or hired by the public."

It seems a pity that, while restoring this boon to the medical officers at large, the old grievance of the stoppage from surgeons of Cavalry and Artillery should be continued. The *executive* officers of these branches of the service receive a higher rate of pay than the line officers specially to cover this stoppage; medical officers of Cavalry and Artillery do not receive very much advantage, but are paid precisely as their brethren in Infantry regiments. This does not appear fair, as

the expenses of the former are much greater than those of the latter. The clause retaining the stoppage is the following:—

"Each officer of the Horse Brigade of the Royal Artillery shall be subject to a stoppage of 6*d.* a day, and each officer of Cavalry to a stoppage of 8½*d.* a day, out of his daily pay, for every ration of hay, straw, and oats drawn by him. Officers of the Military Train are not liable to this stoppage."

LIFE FOR LIFE.

SEVEN men at the present time await the extreme penalty of the law. Their crime is of that nature that excludes all hopes of mercy. Murder and piracy, each aggravating the horror of the other, have been perpetrated with all the recklessness of consequence and indifference as to results characteristic of the worst form of such desperate wickedness. Offences of this kind are happily rare. Our knowledge of them is chiefly derived from the black records of days when nations exhibited less regard for the interests of humanity than now prevails. The discipline of a ship is so essential to her safety that the disobedience of one may at any hour imperil the lives of all. Hence the captain has supreme power on board. It is necessary that it should be so since a few planks separate the crew from the fathomless depths of ocean.

Piracy is now justly considered as an outrage upon nations, and all countries on friendly relations with each other are prompt in delivering to justice those accused of its commission. In this particular case speedy retribution seems to have followed on the murders committed and the signal robbery completed. In a far distant region the confident crew had scarce reached land to spend their ill-gotten gain before the ubiquitous influence of British justice prevailed to the complete and utter discomfiture of the desperadoes who, red-handed, sought to enjoy their spoil. Their trial at the Old Bailey will serve as a moral lesson to all who tender their services on board British ships. It shows that such outrages, however and wherever committed, are sure to be discovered and as certain to be revenged. In behalf of the wretches who now occupy the condemned cells no voice of pity or cry of remonstrance has been raised; nor is it probable that there will be. It will follow that there must be a partial revival of those scenes which before the amendment of the criminal law were wont to occur—when men were hanged in batches, and not at all to the edification of the crowd. We do not think that such an exhibition will be in any way conducive to the moral or social welfare of the community, and would gladly hear of some means being adopted whereby the evil it is calculated to occasion might be diminished. This could in a measure be effected by preventing the occupation at least of the street within the limits of the jail. Publicity might thereby be preserved, and at the same time social decency saved the rude shock which such exhibitions invariably occasion.

PETROLEUM AND PARAFFIN.

CALAMITIES by fire have been falling around us thick and fast. It is only a few days since that the overflowing of a lamp caused the ignition of gunpowder stored in some hundred different barrels, a strong vessel being shivered into fragments by the explosion; providentially no lives were lost on this occasion. It is but the other day that the whole world was horrified by the awful catastrophe at Santiago, which also in great measure resulted from the overflowing of the easily ignited contents of lamps.

These calamities have had the effect of thoroughly rousing the attention of the public. Accidents similar to those we have referred to may of course occur again, and if we can but devise means to prevent their recurrence, the poor people who have been thus sacrificed, it is some consolation to think, will not have perished in vain.

One fertile source of numerous accidents is the petroleum oil which has of late years come into such extensive use, and it is from this source in particular that future danger is to be apprehended. It will be in the recollection of our readers that some time since we published a report entitled "Paraffin Oil: its Impurities and Adulterations." From that report it appeared that a large proportion of the samples vended under the much-abused name of paraffin oil ignited at such low temperatures as to render them highly dangerous, the wonder being that accidents from this cause are not of more frequent occurrence. In that report we stated that no oil ought to be regarded as absolutely safe which permanently ignited under a temperature of 130° Fahr. We believe that the Edinburgh Town Council, in some recent regulations on this subject, have adopted this standard; and we are glad to learn from a letter contained in *The Times* of the 8th inst. that Mr. Young guarantees that no oil manufactured by the firm of which he is the principal shall ignite under that temperature, and that the trade have adopted that as a standard of safety. In the legislation which took place some time back in reference to the storage of petroleum, or rock oil, we are sorry to state that a very much lower temperature—namely, 100° Fahr., was adopted, and hence we fear that future danger will arise.

Critical and Explanatory Comments

ON THE

NEW PHARMACOPŒIA,

INDICATING THE

EXTENT AND CHARACTER OF THE CHANGES MADE, AND THE RELATIVE VALUE OF THE NEW AND OLD PROCESSES & PREPARATIONS.

No. V.

WHEN speaking of the Infusions we omitted to point out th great change which had been made in infusum gentianæ. The Edinburgh formula with proof spirit is that chosen. It contains twice as much gentian as the London infusion, and substitutes corianders for lemon-peel. The materials are first macerated in proof spirit, and after two hours the water is added cold. It is, therefore, rather a mongrel preparation, being something between an infusion and a tincture. It is, in our opinion, very inferior to that made by the old London formula, both in appearance and flavour. It is not transparent, and tastes most unpleasantly bitter. Infusum calumbæ, formerly made with hot, is now made with cold water; and this is also the case with infusum chirettæ. Infusum cusso is another instance of the curious way in which the Pharmacopœia has collected together all the known anthelmintics, whether they are much in use or not. We find extractum filicis liquidum, kamela, decoctum granati, santonine, and infusum cusso. Never was a Pharmacopœia so rich in this class of remedies. Infusum quassæ is now three times as strong as formerly; and infusum rosæ no longer contains any sugar. Whether the compounds of lithia possess all the valuable properties in gout &c. that have been claimed for them, is very doubtful; but as they are the peculiar favourites of a member of the Committee, we are not surprised at their introduction into the Pharmacopœia. These compounds find no use except as a solvent for uric acid in the cases we have mentioned; but, with great inconsistency, the Pharmacopœia, which gives processes for things that may readily be had by the ton, shirks the responsibility of saying how carbonate of lithia is to be prepared. However, the production of this substance from the raw materials is a very complicated operation. In preparing citrate of lithia, our experience differs from that of the Pharmacopœia. The solution of 50 grs. of carbonate of lithia in 90 grs. (it should be 100 grs.)

of citric acid, is to be evaporated as far as it will go on a steam heat, and the viscid mass is to be dried in an air-chamber at 240°. We have invariably found that the evaporation may be finished on the water-bath; that no viscid mass is obtained; but that it may be obtained as a dry powder, or even in crystals.

There is little to be said about the preparations of magnesia, except that the heavy calcined magnesia is introduced for the first time, with a process for preparing it. In previous Pharmacopœias magnesiæ carbonas always implied light carbonate of magnesia, the heavy being called magnesiæ carbonas ponderosum. The British Pharmacopœia, on the contrary, understands by magnesiæ carbonas the heavy carbonate, and distinguishes the light variety as magnesiæ carbonas levis. There is another preparation largely used by the public on their own responsibility, as well as frequently prescribed by the profession—the fluid magnesia. We think that a medicine in such universal use might have been recognised by the Pharmacopœia; and in order to ensure uniformity, either a process might have been given for its preparation, or its qualities and the amount of the magnesia which it should contain defined, with appropriate tests. The Pharmacopœia is as much bound to adopt that which is generally esteemed as to originate new compounds.

The mel rosæ of the English and Scotch Pharmacopœias is discontinued. It was very liable to ferment, and was of very slight remedial value.

Of mezereon, the bark of the root was formerly employed; the bark simply is now ordered.

The mistura creasoti is adopted from the Edinburgh Pharmacopœia, and is in some respects a remarkable preparation. Glacial acetic acid is seldom if ever used for medicinal purposes. It is rather a photographer's article; but its introduction into the Pharmacopœia, with a process for making it, now becomes evident. Mistura creasoti contains as much as one minim in every ounce. Glacial acetic acid is, therefore, at once the most concentrated and most dilute form of the acid in the British Pharmacopœia. Its introduction into this formula is quite inexplicable. True, creasote is dissolved by it in its most concentrated form, but is again completely precipitated on the addition of a small quantity of water. It is, therefore, useless as a solvent; and three times the quantity of acetic acid of the usual strength would answer the same purpose if the presence of a minute quantity of acetic acid is required. The creasote, which is present also in the proportion of one minim to an ounce of water, makes a perfectly clear solution without any addition; but the spirit of juniper, when it is added, makes a milky mixture by the separation of the oil of juniper. This preparation is, therefore, susceptible of improvement.

In the preparation of hydrochlorate of morphia the process of Gregory is recommended, which has been found to succeed better than any other on the large scale. One great precaution must be taken if a white salt is required: the hydrochloric acid, chloride of calcium, and purified animal charcoal employed must be free from every trace of iron, which would give a reddish colour to the preparation. This is again a process which is useless to the pharmaceutist on a small scale. The essential condition of working to advantage is that the process should be continuous, so that the mother liquors of one batch can be worked up in the next. To prepare morphia, as recommended by the Pharmacopœia, in one operation, would be ruinous; probably more than one-half of it would be lost. The introduction of these chemical processes into the Pharmacopœia can only be explained on two hypotheses: either it is intended to make the Pharmacopœia a good basis for the examination of students, or that, supposing the pharmaceutist is by any means cut off from his commercial supplies, he may find in the Pharmacopœia directions for making for himself those preparations which he would otherwise purchase. If the latter be the object in view, a far more easy and productive process, on *the small scale*, might have been given; we mean the process of Mohr, which may be briefly described. It depends on the property which morphia possesses of forming a soluble compound with lime, while it is very slightly soluble in a solution of ammonia. Twenty parts of opium are boiled for half an hour with sixty parts of water; and this operation is repeated three times. The solution thus obtained is evaporated to one-half, and poured into a mixture of forty parts of water and five parts of hydrate of lime. The whole is then boiled for a quarter of an hour, filtered, and pressed. The filtrate is now to be evaporated to forty parts, filtered, and mixed with a hot solution of two parts of sal ammoniac. Under these circumstances the whole of the morphia gradually separates in crystals, which are very pure, and contain but little colouring-matter. They should be collected, washed with cold water, and dissolved in dilute hydrochloric acid, decolorized with a little pure animal charcoal, and crystallized. In this process scarcely anything but morphia is dissolved by the excess of lime. The meconic acid, narcotin, and most of the colouring-matters which are of an acid nature, are precipitated in combination with the lime. The whole of the morphia is thus obtained at once, without leaving any coloured mother liquors. Acetate of morphia is very properly left out of the British Pharmacopœia. It was in every way an unnecessary and unsatisfactory compound. Its properties do not sensibly differ from those of the hydrochlorate; but it is with difficulty crystallizable, and, without the addition of acetic acid, is not perfectly soluble in water. Moreover, it soon decomposes spontaneously, and becomes brown. It is worthy of remark, that three different salts of morphia are principally used in England, America, and Germany. In the United States, the sulphate in crystals is almost exclusively employed; in England and her colonies (Canada, perhaps, excepted), chiefly the hydrochlorate in powder; in Germany, the unsatisfactory acetate. In France, pure morphia is as much used as any of its salts. The Pharmacopœia directs the crystals of hydrochlorate of morphia to be dried on blotting-paper. This is a great source of loss. The crystals of this salt hold the mother liquor like a sponge, and it can only be got out of them by using considerable quantities of blotting-paper, which, of course, sucks up all the salt contained in the mother liquor, and which is therefore lost. The usual plan is to press the mass of pure crystals, and powder the resulting cake. No object is attained by insisting on the production of this salt in crystals. It becomes simply more expensive without being any better.

Oxymel scillæ is probably omitted because the acetum from which it was made is abolished; but a process might have been employed for making it, similar to that recommended for syrupus scillæ. It was a preparation much esteemed both by the public and the profession.

Pilula aloes was a Scotch preparation, and was made with socotrine aloes. The new Pharmacopœia directs a pill made both in this way and with Barbadoes aloes; but there is not much difference in their properties.

Pilula assafœtidæ of the Edinburgh Pharmacopœia is adopted, to the exclusion of pilula galbani of the London College; while the pilula calomelanos composita of the Dublin takes the place of the pilula hydrargyri composita.

Pilula colocynthidis composita is the Edinburgh formula; but it differs much from the pill of the same name in the London Pharmacopœia of 1851. This latter was intended to replace the extractum colocynthidis compositum of the 1836 edition, but was comparatively a failure. It was never much used, as the extract it was intended to supersede was almost invariably preferred. Now that this extract has been restored to its place, it is not probable that the new pill will be much employed.

Pilula scillæ cum opio, pilula colocynthidis et hyoscyami, and pilula ferri carbonatis (intended to replace pilula ferri composita), are Scotch formulæ; and pilula opii is the Dublin form of the pilula saponis composita. This latter was, perhaps, a better name for the pill, as under this guise opium could be prescribed without the knowledge of patients who have a prejudice against it. Another preparation which could be used for the same purpose—pilula styracis composita—has disappeared.

On leaving the pills, we encounter a large collection of chemical processes, the greater number of which are wholly out of place; directions, in fact, are given for making a number of substances which are to be obtained sufficiently pure in commerce, and at very cheap rates. What, for example, can be the object of encumbering the book with such processes as those for acetate of lead and chlorate of potash? It is true that the pharmaceutist might be able to make these substances himself; but for want of proper appliances, and experience in manipulation, the products would probably be inferior to those furnished in trade. The amateur manufacture of such a chemical as chlorate of potash bears, perhaps, about the same relation to its manufacture on the large scale as the growth of the cinchona plant in a Ward's case to its native production. As it is, the process given for making chlorate of potash is not that which is found to be the best and most economical. The Pharmacopœia gives the original one of Liebig, which was certainly an immense improvement on the old one with caustic potash; but this plan has since been improved, and chloride of potassium, which is only one-third the price, can now be used instead of the carbonate of potash, as originally proposed, and still recommended by the Pharmacopœia.

The specialities of the so-called eclectic practitioners of America are represented in the British Pharmacopœia by

Podophyllin. The names which have been given to their preparations by these gentlemen are wholly indefensible. However impure and mixed the nature of the thing may be, they dub it an "ine," so as to convey an idea that it is an alkaloid, or, at any rate, a definite active principle. In almost every instance nothing of the kind is the case, and the Pharmacopœia has very properly altered the name podophyllin to resina podophylli. Resin of podophyllum is a powerful purgative, and is generally supposed to exercise a direct action on the liver; in fact, it has been considered to be a vegetable substitute for calomel.

Potassæ acetas will not be quite white if made according to the instructions given. In order to get it into this state, it should be evaporated to dryness, fused for some time, dissolved in water, and the solution filtered and evaporated to dryness. If the salt is now fused, it will be perfectly white, and answer to the description given in the Pharmacopœia. The solution of acetate of potash, when first prepared, invariably contains some organic matter, which, being carbonized by the fusion, spoils the colour of the salt; but it is removed by the treatment we have described. The process for making small quantities of bicarbonate of potash is excellent, but the glass tube which conducts the carbonic acid need not dip below the surface of the solution of carbonate of potash, as it stands a chance of becoming stopped up by the crystals formed. The solution of carbonate of potash will absorb the carbonic acid very readily by its surface, and the crystals of bicarbonate will be finer, as the liquid is not disturbed by the passage of bubbles of gas.

THE

TREATMENT OF THE INSANE IN PRIVATE DWELLINGS IN SCOTLAND.

No. I.

THE treatment of the insane in asylums, both public and private, has for some years been the subject of anxious and solicitous attention; and the ameliorations effected in their condition have been such as to place the asylums of England at the head of all similar establishments throughout the world, and to bring those of Scotland into a greatly improved condition, although not quite into the same rank as our own.

The lunacy laws of Scotland differ from those of England in respect to the provision which they make for permitting a large number of insane persons to remain out of asylums under the guardianship of private individuals, and for exercising more or less supervision over them. In this respect the lunacy law of Scotland is justly said by a recent author, whose book lies now before us,* to display a more comprehensive philanthropy, and to pass the laws of England and Ireland, as also those of foreign countries, in a direction which is sure of being followed, should these laws undergo change; but it will be seen that it has long been liable to the most terrible abuse.

Dr. Mitchell, as a Deputy Commissioner in Lunacy for Scotland, has had great opportunities in the course of his inquisitions of becoming acquainted with the condition of the insane in private dwellings there; and his revelations of that condition form so striking a page in social history, and are suggestive of considerations so important, that we cannot omit to give an outline of some of the facts which he discloses, and which rest upon undoubted official authority.

On the 1st of January, 1862, the entire number of the insane in private dwellings in Scotland was estimated at 3628; of whom 1887 were not paupers, and 1741 were paupers. No less than 4d per cent. of all the insane in the country were found out of asylums: the relative proportions being 33 per cent. of paupers, and 65 per cent. of non-pauper lunatics. How the matter stands in England we know not; but in an excellent paper in the *Journal of Mental Science* for October, 1862, Dr. Arlidge calculated that there were some 12,000 private single cases of insanity in England which are not included in the statistical tables of the Lunacy Commissioners, and as to these the amount of information possessed is very imperfect and fragmentary. The Scotch Commissioners, however, take more general and direct cognizance of these cases in their country, and they form the subjects of the statements of Dr. Mitchell.

The first class of insane persons, not paupers, in private dwellings, are those who are placed under the care of strangers; and the Scotch law, like the English, requires that they be duly certified by two physicians and supervised by the legal authorities: as is just; since, being placed with strangers who make a profit by them, they are liable to ill-treatment and improper detention. But this provision is evaded to a great extent; for, whereas the whole number of such patients is estimated at 300, only 21 (or 1 in 15) are actually certified or supervised. Dr. Mitchell observes that "this is greatly to be regretted, as the inquiries of the Commissioners leave no doubt as to the existence of abuses, which, in consequence of this evasion, it is not in their power to correct." One great cause of evasion seems to be the unwillingness to publish the fact of lunacy in families by the application to a Sheriff, as the law requires. This may afford a useful hint to those who would require in England an application to a magistrate before certifying any lunatic in this country. The system has been found to work so badly in Scotland that Dr. Mitchell now proposes "to substitute for the *order* of the Sheriff, the less formal and less formidable *sanction* of the *Board of Lunacy*, which would not be so strongly objected to:" in fact, to revert to the present English system.

Passing to that class of insane patients who live with relatives or in their houses, we find them in still worse plight, for over them the Board has less control; and although the law requires that after more than a year has passed, and if the insanity is such as to require coercion and restraint, the occupier of the house, or any medical practitioner attending, shall give notice to the Board, yet "doubts as to what constitutes *coercion* and *restraint*, and a natural disinclination on the part of medical men to be informers, will always make the provisions of the law on this point very limited in their utility." And, moreover, in the present state of the law, it does not appear, even when such cases are brought under the notice of the Board and the most flagrant abuses pointed out, that they have been able to provide any remedy, or to do more than give advice, which has frequently been totally disregarded. Of the failure of the Board to rectify such abuses some horrible examples are given, which in a less authentic record would be considered quite incredible. We must quote some examples in order that this part of the case may be palpable. Seventy per cent. of the lunatics not in private asylums, and not "paupers" in the Scotch parochial sense of the term, are yet in indigent or straitened circumstances. The rigid exclusion of such persons from public asylums in Scotland seems to be productive of a degree of misery and an intensity of abuse which can only be realized by the detail of individual sufferings. Dr. Mitchell describes the following as a common and typical case:—

"The son of an able-bodied labourer, for instance, becomes insane, and relief is applied for, but is refused, because the father is able-bodied, and therefore bound to support his children. He cannot, however, send his son to an asylum. His whole earnings would scarcely do more than pay a pauper's board. So he puts a strait-jacket on him, or chains him to the wall, or builds a little cell for him and locks him up there. He does something of this kind in order that he may get out to his work, without leaving his wife in danger. But it may be that he is too tender-hearted for such a course, and to avoid it he stays more or less constantly at home, and sends his wife out to work. She earns little, however, and poverty and pinching come, with confusion, misery, heartlessness, neglect, indifference, and disease. He then renews his application, and, being no longer an able-bodied father, his son is received as a pauper lunatic. By some such road as this many lunatics travel down to pauperism, dragging their whole family along with them."

The representations of the Board of Lunacy, when they be-

* The Insane in Private Dwellings. By Arthur Mitchell, A.M., M.D., Deputy Commissioner in Lunacy for Scotland. Edinburgh: Edmonston and Douglas. 1864.

come acquainted with such cases, and remonstrate, are sometimes slighted, as in the following case thus reported:—

"Æt. twenty-four. Epileptic mania. Has had fits for fourteen years—fits frequent and severe; is greatly excited before and after them; fancies he sees people and objects which are not present; is incoherent and rambling in conversation, and pale and sickly in appearance. Attacks his mother and sisters, who are afraid of him, and keep ropes always ready to bind him. He is treated with kindness, so far as intention goes, but his mother evidently lives in a constant state of dread. He is not a pauper, and relief has not been asked.

"The attention of the parochial board was called to this case, and a recommendation made that the parish should send him to an asylum, as a precaution against accident, or even loss of life; but this was not done. Another report then reached the board, in which it is stated that he strikes his mother and sisters; that they are afraid of him; that his mother has had no sleep for five nights from dread of him; that he was found bound in a strait-jacket; that he falls in the fire, and has many marks of burns, and that he was insufficiently clothed. Accordingly the recommendation was renewed, when the inspector reported that the case had been repeatedly under the consideration of the parochial board, and that the claims of M. S—— to be considered a pauper 'were refused on the ground that he lives with his mother and sisters, who are in possession of a good lot of land, with stock thereon, quite sufficient to support and keep them in comfortable circumstances.' This was true, in the sense that she was able to support him at home, so long as he was peaceable and well disposed; but it was not true that she was able to provide for his proper care when he became violent and dangerous, and required treatment in an asylum. In the meantime this poor lad died of lockjaw, under circumstances which, in connexion with the recommendations of the board, led the Procurator-Fiscal to report the case to Crown Counsel."

Most of the cases to which Dr. Mitchell refers thus far are those in which both patients and guardians, though not paupers, have nevertheless been in a state of decided poverty. But too frequently, he tells us, patients have been met with surrounded by evidences of something like wealth, yet whose condition was one of the utmost wretchedness and neglect. Here is an instance:—

"E. G——, aged forty-one, is thus reported on:—'A large-featured, gibbous jawed dwarf, whose hair is so thick, matted, and solid, that the dimensions of the head could not be estimated; whose skin is generally excoriated; whose teeth are gone, and whose legs are contracted. Has been liable to epilepsy since she was seven years old. Hand was severely burned, and fore-finger distorted in consequence. From the deformity and contraction of legs, falls in attempting to stand or walk, but may crawl to door. Of dirty habits. She cannot wash or dress herself. Found grovelling among ashes close to fire, in which the nates have formed a nest or shallow pit, where she crouches during the day. Has often fallen into the fire and been burned. Sometimes sits up during the whole night roaring, howling, and biting. Speaks, but not intelligibly. Bed of breckan in a box near the kitchen fire, all shockingly filthy. Clothing black and disgusting. Her hair never was combed. Skin covered with layers of soot and ashes. Lives with her mother and brother. This is, perhaps, the most wretched and neglected case the Reporter has seen, and this amidst comparative wealth, and in a house giving evidence of a coarse affluence.' The powers of the Board did not admit of any interference in this case."

Those who possess property, and whose relatives are interested in detaining them at home, seem to be sometimes still worse off; for although the Court of Session, when applied to, undertakes the responsibility of the proper administration of the property of a lunatic, and appoints for that purpose a *curator bonis*, who reports to the Accountant of Court, there is still no control over the person of the lunatic, nor over his place or style of residence. There is no provision for the proper application of his funds: they may be hoarded for the benefit of survivors, or sums may be nominally spent on him which are really spent on others, the insane possessor leading in the mean time something worse than a pauper's life. In a case detailed, where a *curator bonis* found the unhappy possessor of wealth "in a filthy and neglected condition, under the care of a near relative and two female domestics," a deaf ear was turned to his remonstrances, and the door was shut in his face; and the Lunacy Board, on being appealed to, "did not think that their statutory powers enabled them to interfere." When, in other cases, they have been called upon to report upon persons so-placed, "the result of the inspection was generally not satisfactory, but interference was impossible." Surely Dr. Mitchell is more than justified in stating that "the insane in Scotland who have property are in a peculiarly helpless and unprotected state."

The most startling disclosures are those as to the condition of insane persons, not paupers, in private dwellings, who are barbarously and cruelly treated or subjected to prolonged restraint. We have not space or heart for the full quotation of the details, but here is the account of a state in which two sisters were found, possessing property originally valued at between £1000 and £2000, but which had melted, by the idleness, drunkenness, and mismanagement of the relatives, to nothing; so that happily becoming paupers, they were finally rescued:—

"M. D——, aged twenty-five, and M. D——, aged thirty-four. These two lunatics, both women, live with their parents.

"In the corner of a low-roofed, dark, clay-floored room, a sort of cage or stall, about eight feet long and five wide, has been rudely constructed of boards, laid close together at the end, but in front with intervals or in bars; and this for seven years has been the place of confinement of the younger of the sisters. So dark is the room, that I found it impossible to discover, by looking between the bars, where she was lying. In order more accurately to ascertain her condition, I procured a candle, had the well-fastened door opened, and entered the cage. I found her huddled up in a corner on some loose straw, in a state of all but nudity, under an old, coarse, and scanty coverlet, begrimed with filth and covered with vermin. She passes her urine and faeces where she lies. The litter impregnated with these evacuations is but rarely changed. My feet sank in it, when I moved about, as in a wet farm-yard dunghill. The stench was sickening, and, at each step I took, imprisoned volumes of offensive gases seemed to be set free from the damp straw. The floor of the cage is of clay and uneven. As I bent over her and spoke to her, she became violent and attempted to strike me, but refused to speak.

"The room itself is dark, dirty, and disorderly in the extreme. Its one bed—a box one—for father, mother, and the other lunatic daughter, is in a state of absolute beastliness. The father was in keeping with all the surroundings: unshaved and unwashed for weeks; in filth-stiffened clothes; haggard and sottish. The whole scene, in short, was an intensification of filth, inhumanity, and degradation that defies description.

"The other daughter I did not see, though I made every effort to find her. She wanders about in the woods in the coldest weather, half naked, and flies from all who approach. She became insane some three years ago, when her parents sent her for three months to the Perth asylum. She was a milliner and an industrious, respectable, well-to-do woman."

Another case is that of an innocent, though most unfortunate, frail and crippled old woman, who for years was cruelly bound hand and foot to a filthy bed, and whom the Commissioners vainly attempted year after year to release, and who died last autumn, aged sixty-seven, in the tenth year of her bondage—"restraint so cruel and barbarous in its nature, that it would have expiated her crime had she been the most foul-hearted murderess that ever lived."

This is the dark side of the treatment of lunatics in Scotland; and it may well be hoped that such things may never occur again. But we can see in the present state of the Lunacy Law there no security for it. And in earnestly exposing the darkest and worst features, in stating exactly these most horrible cases, Dr. Mitchell has rendered great service. For such things cannot survive exposure. The law which protects the persons of Chancery lunatics in England must be extended to Scotland, and, if need be, strengthened and improved. If lunatics require protection against any class of certifying physicians, let that protection be afforded to the utmost; but here at least it is evident how much they need to be "saved from their friends." The rigid interpretation of the law of pauperism

is obviously a source of terrible suffering in Scotland, and the necessity of a more liberal application of that law is most evident from these pages. We shall return to this subject next week, and follow Dr. Mitchell through the rest of his volume.

ROYAL COLLEGE OF PHYSICIANS.

ABSTRACTS OF

DR. GARROD'S LECTURES ON THE BRITISH PHARMACOPŒIA.

LECTURE III.

THE lecturer continued his observations on the changes in the Materia Medica. He observed that of the salts of silver, the only novelty introduced into the British Pharmacopœia is the oxide. When taken internally, it is converted into the chloride of silver, and acts as a sedative on the mucous membrane. It is useful in certain gastric affections; also when it is desirable that silver should be absorbed, as in hæmorrhage. It may be employed with advantage where the action of silver is required in diseases of the nervous system. The topical action of the oxide of silver is very slight. It is said not to cause darkening of the skin, as the nitrate of silver does; it would, however, the lecturer thought, if it were long continued, inasmuch as both are converted into chlorides in the stomach. The dose is a quarter, half, and one grain; and it is best given in a simple form. There is one thing with which it must never be prescribed (and it is liable to be so prescribed in stomach affections), namely, creasote; thus combined, combustion has been known to take place on the chemist's counter.

The chemistry of cocculus indicus is not devoid of interest. The kernel contains a nitrogenized crystalline neutral principle, picrotoxine (C_{12} H, O_5); and an alkaloid, menispermine (C_{18} H_{12} NO_3); united with cocculinic acid, found chiefly in the shell. The action of cocculus indicus, as well as that of picrotoxine, appears to be directed to the cerebellum and corpora quadrigemina. Animals that have been experimented upon lose the power of directing their movements, and fish turn over on one side when poisoned by it. The effect upon man has been very little studied. There are large quantities imported, but only a small portion of it is legitimately accounted for. Doubtless many unconsciously take it, and it produces a desire in them to remain stationary, but does not deprive them of the power of drinking. An ointment is directed to be prepared from it, and is employed to destroy pediculi, and also in some chronic skin diseases; but it should never be applied to an abraded surface: death has resulted from its being absorbed.

Two preparations are ordered to be made from canabis indica—viz., an alcoholic extract and a tincture. The true physiological explanation of the action of this remedy remains a desideratum. In small doses it excites the nervous system, and does not cause dilatation of the pupil; it acts as a narcotic and sedative. In neuralgia and some anomalous spasmodic affections, it has been given with advantage; as an anodyne and antispasmodic it is established. In large doses it produces numbness. The action of this remedy is upon the brain and spinal cord. The after-effects of this remedy differ from opium in not producing constipation and loss of appetite. The dose of the tincture is from five to twenty minims. It should not be given in water, as the resin in which the virtue of the drug resides is deposited by it. The sp. ammon. co., or any alkali, will hold it in solution.

Digitaline has been made officinal. It is a greyish-white powder. Physiologically and therapeutically it acts as the leaf. The dose is one-fiftieth of a grain. He (Dr. Garrod) is of opinion that this preparation might have been dispensed with. Large doses of digitalis are being revived. It has been found valuable in inflammations, delirium tremens, and some years ago he suggested its employment in acute mania. It has since been tried, and the results have proved satisfactory.

Ferrum redactum, or reduced iron, is added to the Materia Medica. He wished to draw attention to it as a most valuable therapeutic agent in anæmia. It is easily dissolved in the stomach, produces little or no topical influence on the mucous membrane of the stomach, and it does not possess the astringent properties of the persalts of iron; hence it may be given without purgatives. One grain is equal to five grains of the citrate of iron. It is also useful in cases of cardiac debility. With respect to the iodides and phosphates of iron, he knew of no chemical facts that placed them above the other preparations of iron.

From bael, or bela, only one preparation has been introduced—namely, the extract. It is much used in India in cases of dysentery and diarrhœa. Nothing is known of its chemical composition any further than that it is an astringent. He had known it fail in cases where gallic acid had proved successful.

Belladonna and its alkaloid possess a topical influence. Applied to the eye, it causes dilatation of the pupil. One-thirtieth of a grain of the alkaloid taken internally will cause dilatation of the pupil, and one-millionth of a grain applied topically will do the same. Belladonna may be given internally to allay pain in neuralgic affections and in gastrodynia. The belladonna liniament will be found beneficial as a local application in allaying pain. From chiretta there is an infusion and tincture directed to be prepared. As to its therapeutic value he had little to remark. It contains a bitter principle like gentian, and is a common remedy in India, useful in atonic dyspepsia and in cases of debilitated stomach resulting from excess in drinking.

The black oxide of manganese has not been added. Some few years ago the sulphate of the protoxide was used as a purgative and cholagogue, first in France, and afterwards in this country. The carbonate has been given with an idea of improving the blood in anæmic conditions. It has been said that there are certain anæmic conditions which require a salt of manganese to cure them. With a view to ascertain the truth of this statement, he took anæmic patients and put them on a good diet. If there was no improvement, he gave them manganese; others he gave Griffith's mixture, substituting sulphate of manganese for the sulphate of iron. No useful result followed. Iron was afterwards given with advantage. It had not fallen to his lot to find any case cured by manganese.

Glycerine is used as an adjunct to lotions to prevent them drying; it has also been given internally as a substitute for cod-liver oil, but from the results of his experiments, he concluded that it exerted no marked influence over tubercular disease, and no power of arresting waste, and it could not be regarded as a substitute for cod-liver oil. It may, perhaps, be used for sweetening purposes where sugar would be undesirable.

Ox gall is supposed to be valuable in dyspepsia where the bile is deficient; and it is also said to promote the peristaltic action of the stomach. When given, it is desirable that it should not come into immediate contact with the stomach; accordingly it is advisable to give it in capsules.

Pepsine has not been added, although he believed it to be in general use. He considered that we should seek to restore the functions of the digestive organs, rather than that they should be carried on by extracts from other animals.

CAMBRIDGE UNIVERSITY.

To the Editor of THE LANCET.

SIR,—Permit me to correct an erroneous impression which might be conveyed by the letter of "Oxford" in your number of the 30th ult. He speaks of the "backwardness on the part of the authorities at Cambridge to bestow rewards on men distinguished in Natural Science," and of the "little substantial encouragement given to scientific studies in the University." Now, what are the facts? The Natural Science Tripos came into existence in 1851, and in the ten years from 1851 to 1860 inclusive, forty-nine men passed the examination with more or less credit, and obtained places in the Tripos; of these seven are either present or late Fellows of Colleges. True, it was not for their proficiency in science alone that they obtained these rewards, but their position in this was accepted as a supplement to their places in the Mathematical Tripos, which were not sufficiently high for the standard of Fellowship at their respective Colleges. In 1861 the new regulations for the Natural Science Tripos came into operation, by which this, as far as degrees were concerned, was placed on an equal footing with the Mathematical and Classical Triposes, and those men whose names appeared in the class list became entitled to the degree of Bachelor of Arts. Students of Medicine have here an especial advantage, for those who pass a satisfactory examination in either Chemistry, Botany, or Comparative Anatomy, on presenting themselves for their medical degrees are exempted from further examination in these subjects. Under these regu-

lations the number of names in the Natural Science list has greatly increased, and several of the Colleges have held out inducements for men to study the subjects. At Downing College, to which I have the honour to belong, we have lately each year awarded one scholarship out of four for proficiency in Natural Science. These scholarships are each of the annual value of £50, with rooms and commons, and are tenable until the holder is of standing to take the B.A. degree. If in the Natural Science Tripos he obtain a first class he retains his scholarship for three years longer, or until he is elected to a Fellowship. Under the new statutes the College is bound to elect an additional Fellow before October, 1865, and one, at least, every subsequent alternate year. These Fellowships are restricted to Medicine and Law, and, of course, in the election to them considerable importance will be attached to the position of the candidates in the Natural or Moral Sciences Tripos.

I believe that no training is so good for the mental powers, preliminary either to the study of Medicine or of Natural Science, as the rigid discipline of a Mathematical course. For proof of this in respect of Medicine I have merely to point to two distinguished sons of Cambridge, the Presidents of the Medical Council and of the Royal College of Physicians, whose names appear high up in the list of wranglers, and of whom their University may be justly proud. In respect of Natural Science the men who in the Tripos have acquitted themselves with most credit have, almost without exception, taken previously good positions as wranglers. I have no doubt but that in time the Natural Science Tripos will establish such an importance for itself that a high place in it will be a passport to a Fellowship; but for the present I do not think that alone it should give a claim to a Fellowship unless accompanied by proficiency, at least, in the older studies of the University.

Upon the particular claims which "Oxford" brings under your notice it is no part of my intention to enter, especially as the gentleman referred to is connected with another College. But it seems to me that such advocacy is injudicious, and little calculated to advance either the interests of the claimant or of "science in Cambridge."—I am, Sir, your obedient servant,

P. W. LATHAM,
Physician to Addenbrooke's Hospital; Examiner for the Natural Sciences Tripos.

Cambridge, Feb. 1864.

To the Editor of THE LANCET.

SIR,—The Natural Sciences are not quite so badly treated here as might be inferred from the letter of your correspondent "Oxford" in THE LANCET of Jan. 30th. It must be admitted that proficiency in them has not been encouraged so much as could have been wished; still it determined the election to Fellowships in two instances—viz., Liveing, of St. John's College, and Latham, of Downing, each of whom was first in the Tripos of his year, and the former is now Professor of Chemistry. Large bodies move slowly. The Natural Sciences have won a Tripos place in the University only in a comparatively recent period; and the disposition is daily increasing to apportion to them their share of honour and emolument.

I remain, Sir, your obedient servant,

February, 1864. CAMBRIDGE.

Parliamentary Intelligence.

HOUSE OF LORDS.

FEBRUARY 5.

THE CONVICT TOWNLEY.

The Earl of CARNARVON, who had given notice of a motion for Monday the 8th, on the subject of the commutation of the sentence passed on the convict George Townley, said that he understood that the Secretary of State intended in a few days to bring in a Bill in the other House to amend the Act under which the convict had been removed from prison to Bethlehem Hospital. He therefore thought it would be better if his own motion were allowed to stand over for the present until they saw what was the result of the discussion elsewhere.

HOUSE OF COMMONS.

FEBRUARY 5.

THE LAW OF INSANITY.

Mr. BRAND gave notice that on Monday the Secretary of State for the Home Department would ask leave to introduce a bill to amend the Act 3 and 4 William IV., chap. 54, intitled "An Act for the Confinement and Maintenance of Criminal Lunatics."

THE CONVICT TOWNLEY.

On the motion of Mr. BRUCE, copies were ordered to be laid on the table of the correspondence which had taken place between the Secretary of State for the Home Department and certain magistrates of the county of Derby and the Governor of the gaol in the county, with reference to the case of George Victor Townley.

THE CRAWLEY COURT-MARTIAL.

Mr. A. MILLS gave notice that he would on the 23rd inst. move that a return be laid on the table of the House, showing the expenses occasioned by the court-martial on Lieutenant-Colonel Crawley, distinguishing the proportions to be defrayed from Imperial and Indian revenues respectively.

FEBRUARY 8.

INSANE PRISONERS.

Sir G. GREY moved for leave to bring in a Bill to amend the Act 3 and 4 William IV., cap. 54, entitled "An Act for making further provision for the Confinement and Maintenance of Insane Prisoners." After giving an exposition of the present law, under which the recent case of Townley had occurred, he proceeded to state, in very full detail, the circumstances of that case and his own course of action, from the letter he received from Mr. Baron Martin immediately after the conviction of and sentence on the prisoner, calling his attention to the case. He maintained that, upon principles of law as well as of humanity, the learned judge was justified in this intervention; and he asked the House whether, his attention having been thus called to the case, it was not his bounden duty to act in the matter. He explained and justified the steps he took, and read the communications which had taken place in the several stages of the subsequent inquiry with the Lunacy Commissioners, the magistrates, and others, up to the time of the removal of the prisoner to Bethlehem Hospital, which was in conformity, he said, with the uniform practice under the existing law. He then adverted to what had afterwards occurred, and to the evidence which the whole case afforded of the defects of the law, especially in allowing the machinery to be set in motion, not by impartial persons, but by agents of the prisoner. He then explained the modifications he proposed to make in the law—alterations which, he thought, would prevent such a miscarriage of justice as had happened in this case. In considering what course should be taken with the prisoner, he had conferred with the Lord Chancellor, who had concurred with him in opinion that, under the circumstances of the case, it would not be right, but would be straining the law, to carry the original sentence into execution.

Mr. MACDONOGH, after reviewing the proceedings in the case, contended that Sir G. Grey had not established a justification; that the words of the Act, "shall be lawful," were not, as Sir George had argued, imperative, but permissive. Assuming, however, that the words were mandatory, the law had been violated, for when the reason of temporary respite had ceased they required (as in an analogous case) that the sentence of the law should be carried into execution.

Mr. NEATE suggested the appointment of a commission or committee that might bring together legal and medical opinions, whereby the law on this difficult subject might be brought into a more satisfactory state.

Mr. LOCKE doubted whether the modifications proposed would get rid of the objections to the law. He saw no reason why the sentence upon Townley should have been commuted. Was the same course, he asked, to be taken in future cases?

Sir G. BOWYER thought Sir G. Grey was not blamable in the case of Townley, but regretted the course he had taken in that of Wright.

After some remarks by Sir B. LEIGHTON,

Mr. BRIGHT said, in his opinion, the statement of Sir G. Grey had made out a complete justification of his whole conduct in this matter, and he believed there was no man in that House who, having been in his position, would have acted differently. Capital punishment was at war with the best and noblest sentiment of the best and noblest of the people. He was astonished that any man was to be found to hold the office of Home Secretary for any length of time, to undergo the agony of deciding upon these cases.

Sir J. PAKINGTON did not think Sir G. Grey could have made more judicious amendments of the law. With respect

to the obloquy cast upon him, in his opinion Sir George had not exposed himself to the attacks that had been made upon him. At the same time, he thought the Government had committed a mistake in commuting the sentence on Townley, who had been saved only by a juggle and a trick. By the very Act under which the reprieve was granted the punishment was revived, and justice ought to have had its course.

Leave was then given to bring in the Bill.

THE METROPOLITAN RAILWAY SCHEMES.

Mr. M. GIBSON, after some discussion, moved for and obtained a select committee to consider the best method of dealing with the railway schemes proposed to be sanctioned within the limits of the metropolis by Bills to be introduced in the present Session, and to report their opinion whether any, and, if any, what schemes should not be proceeded with during the present Session—Mr. M. Gibson, Lord Stanley, Mr. Massey, Colonel Wilson Patten, and Mr. Herbert to be members of the committee. He explained the reasons which rendered this course of proceeding, which he admitted to be novel and exceptional, in the opinion of the Government, expedient, as he should propose that the Lords should appoint an equal number of members to act with the members of this House as a joint committee, as likely to have a more satisfactory result than if the inquiry were conducted by separate committees.

FEBRUARY 9.

THE TOWNLEY CASE.

Sir F. KELLY asked the Secretary for the Home Department if the certificates of the magistrates and medical men upon which Townley was removed would be included in the papers to be laid on the table of the House prior to the second reading of the Bill read a first time last night.

Sir G. GREY said the documents referred to would be included in the papers, and they would be produced before the second reading of the Bill.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 4th inst.:—

Haines, Richard Wheeler, Bromsgrove.
Soper, Robert Wills, Dartmouth, S. Devon.

ROYAL COLLEGE OF SURGEONS.—The Hunterian Oration is now delivered biennially in this institution, consequently there will not be any discourse on the 14th inst.

COLLEGIATE ELECTION.—It is stated that the annual election of Fellows of the Royal College of Surgeons of England into the Council of that corporation will lose no portion of the interest attached to these proceedings at the ensuing meeting in July. The names of several gentlemen, both metropolitan and provincial, are already mentioned as likely to be brought forward to supply the vacancies occasioned by the lamented decease of Mr. Green and the resignation of Professor Gulliver; and should no other death vacancy or resignation be previously reported, Mr. Hancock will have to retire in the prescribed order, but will of course offer himself for re-election, having only been one year in office. The veteran Lawrence, now between eighty and ninety, may be seen constantly at Professor Huxley's lectures, in which he appears much interested.

MEDICAL CHARITIES.—The following institutions have lately benefited under the wills respectively mentioned, and, as will be seen, to most considerable amounts:—Mr. John Farnell, the head of the firm of Farnell and Watson, has bequeathed to the Royal Orthopædic Hospital £1000; the Hospital for Consumption at Brompton, £1000; the Asylum for Idiots, £1000; and the Cancer Hospital, £1000. Altogether this gentleman has left to medical and general charities £22,000. The late Miss Gale, of Andover and Cadogan-place, has bequeathed to the Middlesex Hospital £1000; to the Royal Free Hospital, Gray's Inn-road, £500; the Fever Hospital, £100; the Deaf and Dumb Asylum, £500; the Indigent Blind, £500; and the Winchester County Hospital, £500.

GUY'S HOSPITAL BIENNIAL FESTIVAL will be held on Wednesday, the 24th inst., at the London Tavern; Alfred Taylor, Esq., F.R.S., in the chair. A long and influential list of stewards promises that the meeting will be one of unusual interest.

DEATH OF THE MEDICAL OFFICER OF HEALTH OF BETHNAL GREEN.—Mr. Samuel Pearce, surgeon, of Bethnal-green, Medical Officer of Health for that district, who has filled that office since the first election under the Metropolitan Local Management Act, died on Wednesday, the 3rd inst., at the age of fifty-five years. Mr. Pearce was a native of Bethnal-green, in which his father, a surgeon, had an extensive practice.

THE "ATHENÆUM" AND "HARD CASH."—Of Mr. Reade's satire on the medical profession we must speak in terms of disapproval. It is altogether misdirected, since it aims at faults of medical practice which disappeared just about the time when the minuet became an obsolete dance. The accusations of vulgar greed insinuated against the entire body of practitioners are unworthy of a writer like Mr. Reade, who, in addition to liberal culture and unquestionable ability, has genuine sympathies with intellectual effort. One statement will by itself suffice to show how little Mr. Reade's ridicule is applicable to existing medical practice. He labours under the impression that doctors of the present day may be justly charged with a reckless use of drastic aperient medicines; and this droll misapprehension leads him into errors from which the experience of any druggist's apprentice, or any lady with a family of children, might have saved him ..... Mr. Reade's case against private asylums is almost as weak as his case against the present state of medical learning. To raise a sensation of disgust for private asylums, he attributes to them faults which at the worst they possess in common with public institutions. For instance, the cruel employment of the cold *douche*, and the personal violence of keepers to patients, which Mr. Reade regards as leading features of private asylums, are certainly not less common in public asylums than in those private houses where patients are treated with comparative luxury and tenderness. The cases which first informed the ordinary public, through the columns of newspapers, that the cold *douche* was often mercilessly applied to insane persons, and that keepers occasionally committed brutal outrages on helpless patients, were cases that occurred in the wards of *public asylums*. We do not need to look at the author's manuscripts to satisfy ourselves that his hostility to private asylums is mainly due to atrocities that have taken place in hospitals supported by public funds. Indeed, the author's case against the private madhouse altogether breaks down.—*Athenæum.*

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—A half-yearly general meeting of the members of this Society was held on the 27th ult., T. A. Stone, Esq., the President, in the chair. It was announced that the petition for a royal charter of incorporation was before the Queen in Council, which would reconstitute the Society on a firmer basis than heretofore. The accounts for the year expired were read, when it appeared that a rather smaller amount of relief had been expended than during the preceding year, being as follows:—Grants for ordinary relief to widows and orphans, £1843 10s.; grants for immediate relief, £21; grants towards self-maintenance of adult orphans, £20; grants for extra relief, £20; grant by general meeting to a widow, £25; total, £1929 10s. The officers and directors for this year were elected. Mr. Stone was re-elected President. We wish to draw the attention of our readers to the propriety of every member of the profession residing within twelve miles of London, or in the county of Middlesex, becoming a member of this Society, which they can do before the 2nd of March next.

ROYAL FREE HOSPITAL.—At the last annual general meeting, the report of the Committee congratulated the Governors on the purchase of the freehold of the hospital for the sum of £5625 10s. 7d. A large sum had also been expended in completing an efficient system of drainage. The thanks of the meeting were given to Dr. Hassall, Dr. O'Connor, and Dr. Cockle, physicians; Messrs. Wakley, Weeden Cooke, Victor de Méric, A. Marsden, M.D., and Mr. F. J. Gant, surgeons; Mr. Hasler Harris, Dentist; Dr. Marsden, the founder of the institution, and to the various officers.

SPANISH MEDICAL CONGRESS.—The committee have sent circulars wherein it is stated that this great scientific meeting will take place in Madrid on the 24th of September next. The Congress is to last six days, which are to be occupied as follows: The first two days will be devoted to written and verbal communications, and the rest to discussions. Foreign members may address the meeting in Spanish or French. Each written communication must not take up more

than twenty minutes, and to oral communications only half that time will be allowed. In the discussions each speaker must confine himself to a quarter of an hour, and no one will be allowed to speak more than once on the same subject. The questions to be discussed are classed as follows:—1. Importance of Quarantines and Lazarettoes. 2. The Value of Surgery in the Treatment of Cancerous Tumours. 3. Causes of Pulmonary Phthisis, and Means of Preventing it, or Lessening its Ravages. 4. Criterion of Moral Liberty (*vel* responsibility?) in Case of Crime. Any title in medicine or surgery is sufficient for admission to the Congress, the fee being sixty reals (twelve shillings), each member being entitled to a copy of the Transactions. Every information will be given by the secretary, Mr. de Luque, Calle Atocha 8 and 9, Madrid, whither intentions to join, and all written communications should be sent.

THE ALLEGED POISONING BY A SURGEON AT HAYLE.—The inquiry into this protracted case was concluded on Friday last. Dr. Taylor, to whom had been committed the analysis of the contents of the stomach of the deceased, said that his death was attributable to an attack of serous apoplexy to which he was predisposed, and that the symptoms were not consistent with any form of poisoning within the knowledge of the analyst. The accused was necessarily acquitted, and left the court amidst the congratulations of his friends—a result which must be satisfactory to his professional brethren.

NORTH STAFFORDSHIRE INFIRMARY.—The medical staff of the North Staffordshire Infirmary, having invited the medical practitioners of the Potteries to a microscopical *soirée* held in the committee-room of that institution, entertained a full attendance of visitors on the 28th ult. Several instruments of high power were employed, and an immense variety of objects were exhibited.

VACCINATION.—A return has been issued of the number of unions or single parishes in England and Wales, in which the guardians or overseers have taken measures to enforce obedience to the Vaccination Act. In England out of some 700 replies, only 79 are in the affirmative. To the return "No," signifying that nothing has been done, the remark in some cases is added "nothing beyond posting placards."

THE BRADFORD INFIRMARY AND DISPENSARY has been recently opened, the alterations and improvements in the building being completed. The total cost has been £4680. One of the wards is named the "Musgrave," in honour of the late Abraham Musgrave, Esq., who contributed largely to the funds. Another will be called the Rev. Dr. Goodwin's ward, that gentleman having furnished it at his own expense.

KINGSTON LYING-IN HOSPITAL.—We have much satisfaction in announcing that this hospital, which, it will be remembered, was closed a few months since for want of funds, has been re-opened, and patients admitted. The exertions recently made by a few of the residents of the locality have been so successful that enough money has been raised to pay off all liabilities, and leave a margin sufficient to keep the institution in working order without prematurely calling upon the public bounty.

THE LONSDALE MEDICO-ETHICAL ASSOCIATION.—The medical practitioners of North Lonsdale have established a Medico-Ethical Association, one of its fundamental objects being the exposure and uprooting of unqualified pretenders to medicine.

THE CLARE COUNTY LUNATIC ASYLUM, now being built at Ennis, is upon a site of forty acres, the front facing the south. It consists of a front centre building, containing the official residences and public rooms. There are wing buildings for patients and the infirmaries, and a rear central building containing dining-hall and other offices. The wide corridors, usual in other asylums, are here avoided with the view of assimilating the arrangements to those of ordinary life, which are considered preferable to the ordinary corridor or "ward system." Accommodation is provided for 260 patients. The infirmaries are sufficiently capacious to contain about one-third of that number. The total cost is estimated at £29,000.

BIRTHS AND DEATHS IN LONDON DURING 1863.—During last year there were 2962 births, and 2870 deaths registered in the City of London, both numbers being below the average of the preceding ten years. Of the deaths thirty-nine per cent. were of children under five years of age.

MEDICAL VACANCIES.

Brighton and Hove Dispensary—Medical Officer for the Northern District, and Resident Medical Officer for the Western Branch.
Charing-cross Hospital—Lecturer on Botany.
North Staffordshire Infirmary—House-Surgeon.
Western General Dispensary—Physician, and Physician-Accoucheur.
York County Hospital—House-Surgeon.

MEDICAL APPOINTMENTS.

J. M. ALSTON, M.D., has been appointed Surgeon to the Summerlee Collieries, Airdrie.

J. J. BARRETT, M.D., has been appointed Medical Officer and Public Vaccinator for the Christchurch District of the St. Saviour's Union, Southwark.

C. BOOTH, M.D., has been elected Surgeon to the Chesterfield and North Derbyshire Hospital and Dispensary, vice T. Jones, F.R.C.S.E., deceased, and W. Smith, M.R.C.S.E., the number of Surgeons having been reduced from four to three at a special meeting of the Governors.

J. BROWN, L.R.C.P.Ed., has been appointed Medical Officer for the Wooler District of the Glendale Union, Northumberland.

H. CANDLISH, M.D., formerly House-Surgeon to the Alnwick Infirmary, has been elected Surgeon, vice G. F. Easton, M.D., promoted to Physician.

J. DIXON, M.D., has been elected Surgeon to the Surrey Dispensary, Great Dover-street, Southwark, vice J. Croft, F.R.C.S.E., resigned.

G. F. EASTON, M.D., Surgeon to the Alnwick Infirmary, has been promoted to Physician, vice G. Wilson, M.D., deceased.

S. GEE, Esq., has been appointed Medical Registrar of the Hospital for Sick Children, Great Ormond-street, vice J. Watson, Esq., resigned.

J. F. HAMILAND, M.D., has been elected Medical Officer and Public Vaccinator for the Whitechurch Dispensary District of the Dungarvan Union, Co. Waterford, vice E. P. Drew, M.D., deceased.

A. JACOB, M.D., has been elected Vice-President of the Royal College of Surgeons, Ireland, vice J. Smyly, F.R.C.S.I., deceased.

A. B. KERNOT, M.R.C.S.E., has been appointed Medical Officer for the Maker District of the Rooth Union, Yorkshire, vice W. Rudd, L.S.A., deceased.

W. LEISHMAN, M.D., has been elected Lecturer on Clinical Medicine, and one of the ordinary Physicians, to the Royal Infirmary, Glasgow, vice C. Ritchie, M.D., resigned.

H. G. MOORE, L.R.C.P.L., has been appointed House-Surgeon and Secretary to the East Suffolk Hospital, Ipswich, vice G. A. Angier, M.D., resigned.

E. H. PITMAN, M.R.C.S.E., has been appointed Medical Officer for the Cheadle District of the Stockport Union, Cheshire, vice W. Barker, M.R.C.S.E., resigned.

R. RENFREW, M.D., has been appointed Surgeon to the Police and Assistant Medical Officer of Health in the Northern Police District of the City of Glasgow, vice D. Miller, M.D., resigned.

S. RINGER, M.R.C.P.L., Professor of Materia Medica at University College Hospital, has been appointed Assistant-Physician to the Hospital for Sick Children, Great Ormond-street, vice C. P. Ingram, M.D., resigned from ill-health.

W. ROBERTSON, M.D., has been appointed Medical Officer for the Southern District of the Glendale Union.

R. WALKER, M.D., has been appointed Medical Officer for the Chatton District and for the Workhouse of the Glendale Union.

J. WATSON, M.D., has been elected Resident Medical Officer to the Chorlton Union Workhouse, Withington, Lancashire, vice W. H. Hughes, M.R.C.S. Eng., resigned.

T. WOODS, M.D., has been elected Medical Officer and Public Vaccinator for the Parsonstown Dispensary District of the Parsonstown Union, King's County, vice T. H. Baker, M.D., deceased.

W. E. WRIGHT, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the No. 1 or Fulham-town District of the Fulham Union, vice C. H. Claridge, M.R.C.S.E., deceased.

MILITARY AND NAVAL MEDICAL APPOINTMENTS.

W. H. ADAM, M.R.C.S.E., Surgeon R.N. Sept. 27th, 1861, has been appointed to the "Adventure."

W. ANDERSON, Assist.-Surg. R.N. Feb. 28th, 1859, from the "Asia" Guard Ship, has been appointed to the "Hector."

G. O. BAILLIE, Assist.-Surg. 6th Bengal Cavalry, has been appointed to assume medical charge of the Division, Staff, and Station Hospital, Meean-Meer, vice Assist.-Surg. J. H. Sylvester, proceeded on field service.

A. BARCLAY, M.D., Staff Surgeon Army, having completed twenty years' full-pay service, has been promoted to Staff Surg.-Major under the provisions of the Royal Warrant of Oct. 1st, 1858.

A. BEYSON, M.D., R.N., has been appointed Director-General of the Medical Department of the Navy, vice Sir John Liddell, retired.

E. J. BUTLER, L.R.C.S.I., Assist.-Surg. R.N. Oct. 20th, 1859, from the "Mutine," has been appointed to the "Royal Adelaide."

W. H. CLARKE, M.R.C.S.E., Surg. R.N. May 10th, 1856, has been appointed to the "Leander."

J. R. COLLISON, Assist.-Surg. Bengal Service, in temporary medical charge of the 13th Native Infantry, has been appointed to officiate as Civil Assist.-Surg. at Azingbur.

F. DUCKWORTH, M.D., Assist.-Surg. Madras Medical Establishment, has been appointed to officiate in medical charge of the 3rd Bengal Infantry during the absence on sick leave to Europe of Assist.-Surg. Riddell, or until further orders.

G. F. ELLIOTT, M.B., Assist.-Surg. R.N. Nov. 3rd, 1855, has been appointed to the "Hogue."

E. FENN, M.R.C.S.E., Assist.-Surg. R.N. June 8th, 1861, has been appointed to the "Victory."

A. GARDEN, M.D., Assist.-Surg. Bengal Service, Civil Assist.-Surg. of Ghazeepore, has been appointed to the civil medical charge of Saharunpore.

J. GOOD, L.R.C.S.Ed., Assist.-Surg. 43rd Foot, has been appointed Staff Assist.-Surg., vice H. Crump, M.D., resigned.

R. A. P. GRANT, M.R.C.S.E., Assist.-Surg. 43rd Foot, has been appointed Staff Assist.-Surg., vice W. Holmes, resigned.

E. HARE, Surg.-Major Bengal Service, has been promoted to Deputy Inspector-General of Hospitals, with temporary rank, vice Deputy Inspector-General of Hospitals M. M'N. Rind, deceased.

R. HENRY, Assist.-Surg. 91st Foot, has been appointed Staff Assist.-Surg., vice P. Davidson, M.D., promoted on the Staff.

J. M. JACKSON, Acting Deputy Inspector-General of Hospitals, Northern Division, Madras, has been appointed to act as Deputy Inspector-General of Hospitals, Pegu Division, vice Surg.-Major Ford, Staff Surgeon at Rangoon, who has reverted to his substantive employment.

A. E. MACKAY, M.D., Surg. R.N. Nov. 12th, 1853, has been appointed to the "Fisgard" (additional) for service in the Naval Department at Somerset House.

A. M'KENNA, M.D., Assist.-Surg. R.N. Oct. 12th, 1854, from the "Hogue," has been appointed to the "Prince Consort."

D. R. MACKINNON, M.B., Staff Surg. Army, having completed twenty years' full-pay service, has been promoted to Staff Surgeon-Major under the provisions of the Royal Warrant of Oct. 1st, 1858.

E. A. MACPHERSON, Staff Surg. Army, having completed twenty years' full-pay service, has been promoted to Staff Surg.-Major under the provisions of the Royal Warrant of Oct. 1st, 1858.

T. MAXWELL, M.D., Surg. Bengal Service, has been appointed to perform the duties of Staff Surg., vice Assist.-Surg. F. R. Wilson.

T. MORIARTY has been appointed Staff Assist.-Surg. Army.

C. P. MULVANY, L.K.Q.C.P.I., Assist.-Surg. R.N. Aug. 4th, 1860, has been appointed to the "Duncan" (additional).

J. G. PILCHER, M.R.C.S.E., Civil Assist.-Surgeon Bengal Service, officiating Superintendent of the Central Prison at Meerut, has been invested with the powers of a Magistrate, to be exercised within the precincts of the Jail.

C. RICKETTS, Assist.-Surg. in civil medical charge at Ferozepore, has been directed to proceed to Rawul-Pindee for duty with the 71st Foot in the field.

S. M. SHERCORE, M.R.C.S E., has been appointed Civil Assist.-Surg. of the 24th Pergunnahs at Bengal.

J. C. SMITH, Assist.-Surg. H.M.'s 19th Regiment, has been appointed to the medical duties of the Civil Station of Ferozepore, vice Assist.-Surgeon C. Ricketts.

C. H. WARD, M.R.C.S.E., Acting Assist.-Surg R.N. Dec. 8th, 1863, from the "Victory," has been appointed to the "Meander" Store Ship at Ascension.

Births, Marriages, and Deaths.

BIRTHS.

On the 24th of Dec., at Bhaugulpore, Bengal, the wife of A. G. Crewe, Civil Surgeon, of a son.

On the 31st ult., at Potter-street, Worksop, the wife of E. Bennett, M.R.C.S., of a daughter.

On the 31st ult., at Ashmount, the wife of P. H. Roe, Surgeon-Major on half-pay, of a son.

On the 1st inst., at Dingle, Co. Kerry, the wife of P. Murphy, M.D., of a son.

On the 5th inst., at Yately, the wife of E. Diver, M.D., of a daughter.

On the 7th inst., at Thornhill-square, Islington, the wife of Robert Pottinger, L.R.C.S.Ed., Staff Surgeon R.N., of a daughter.

On the 8th inst., at Hans-place, the wife of J. R. Traer, F.R.C.S.E., of a son.

On the 9th inst., the wife of W. D. Parsons, M.R.C.S.E., of a daughter.

MARRIAGES.

On the 1st inst., at Dublin, P. C. Smyly, M.D., eldest son of the late J. Smyly, F.R.C.S.I., to Selina Maria, daughter of the Hon. J. Plunket, of Sherrington, Bray.

On the 2nd inst., at St. Dogwells, Pembrokeshire, Henry Hicks, Surgeon, of St. David's, to Mary, only daughter of the Rev. P. D. Richardson, Vicar of St. Dogwells.

On the 3rd inst., at Wormingford, Essex, W. Haward, M.R.C.S.E., Staff Assist.-Surg. Army, to Sarah Jane, daughter of J. T. L. Hallum, Esq., of Wormingford-grove.

On the 4th inst., at Preston, R. M'Nab, M.D., Surgeon 53rd Regiment, to Ellenor Esther, daughter of J. Humber, Esq.

On the 4th inst., at St. John's Church, Paddington, E. Chisholm, M.R.C.S.E., late of Calder House, Newtown, Sydney, to Emily, daughter of W. Gardner, Esq., of Dover.

On the 8th inst., at Nice, J. J. Meyhoffer, M.D., of Berne, Switzerland, to Mary Anne, daughter of the late E. W. Elton, Esq., of London.

On the 9th inst., at St. Marylebone Church, W. Cadge, F.R.C.S.E., of Norwich, to Mary, daughter of the late John Quain, Esq., of Mallow, Ireland.

DEATHS.

On the 27th of Dec., at Toronto, Canada West, C. Gardner, M.D., aged 40.

On the 7th ult., at Davenport House, Staleybridge, John Brierley, M.R.C.S.E., aged 55.

On the 30th ult., at Cittadella, Joshua Bull, M.D.

On the 31st ult., E. Cowcher, M.R.C.S.E., of Abingdon, one of the Coroners for the County of Berks, aged 77.

On the 3rd inst., W. Vaughan Jones, M.R.C.S.E., of Festiniog, Merionethshire, aged 41.

On the 4th inst., at Lincoln, of scarlet fever, Isaac Dunlin Ward, Esq., late House-Surgeon at the Royal Infirmary, Manchester, aged 26.

On the 6th inst., W. Strowd Partridge, L.S.A., of High-street, Bordesley, Birmingham, aged 43.

On the 8th inst., at Edinburgh, John Gunn, L.R.C.S.Ed., Surgeon R.N. Jan. 26th, 1855.

BOOKS ETC. RECEIVED.

Dr. Leishman on the Mechanism of Parturition.
Dr. Macloughlin on a Specific Enteric Disease.
Mr. Hamilton on Restoration of Lost Nose.
Ten Years of Operative Surgery. Part II.
Watts's Dictionary of Chemistry. Part XII.
Dr. Lawrie on the Roman or Turkish Bath.
Art Journal.
Social Science Review.
Dublin Quarterly Medical Journal.

Medical Diary of the Week.

MONDAY, FEB. 15
- ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
- METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.
- MEDICAL SOCIETY OF LONDON.—8½ P.M. Lettsomian Lectures on Physiology, by Dr. Edward Smith. Lecture I.: "The Rate of Pulsation under the Influence of numerous Agencies in Health and Disease."

TUESDAY, FEB. 16
- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Experimental Optics."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."
- PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

WEDNESDAY, FEB. 17
- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
- ROYAL COLLEGE OF PHYSICIANS. — 5 P.M. Gulstonian Lectures: Dr. Markham, "On the Uses of Blood-letting in Disease."
- JUNIOR MEDICAL SOCIETY OF LONDON.—8 P.M. Meeting at the Whittington Club, Arundel-street, Strand. Mr. J. Warrington Haward, "On the Treatment of Hernia."

THURSDAY, FEB. 18
- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL — Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- WEST LONDON HOSPITAL.—Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Experimental Optics."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

FRIDAY, FEB. 19
- WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
- ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Gulstonian Lectures: Dr. Markham, "On the Uses of Blood-letting in Disease."
- ROYAL INSTITUTION. — 8 P.M. Mr. W. S. Savory, "On Dreaming and Somnambulism."

SATURDAY, FEB. 20
- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- LOCK HOSPITAL, Dean-street, Soho.—Clinical Demonstrations and Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION. — 3 P.M. Prof. Frankland, "On the Metallic Elements."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

To Correspondents.

HEALTH ASSURANCE OFFICES.

Mr. Wood, Mr. Payne, Lignum, A Poor M.D., and others.—We have received prospectuses from the following Offices:—The British Prudential Assurance Company, 35, Ludgate-hill; The Confident Life Assurance Company, 13, Finsbury-place South; The Friend in Need Life Assurance Company, 471, Oxford-street. By these it appears that assurances may be effected against sickness or accident. We would advise our correspondents to apply personally to either of these Offices, where they will obtain the necessary information.

Dr. James Menzies' letter has many points of interest; but we do not think its publication would effect any good object at the present time.

Aristarchus.—We trust the whole matter will soon be fully discussed in Parliament.

LOCAL ANÆSTHESIA.

To the Editor of THE LANCET.

SIR,—Permit me to solicit of your readers information on the following questions:—

1st. If, in the local anæsthesia of a limb, insensibility to pain is produced from the point of application of the anæsthetic to the extremity of the limb?

2nd. Is the local anæsthesia of a limb affected by the perfect compression of the arteries on the cardiac side of the point of application? One would think in such a case that the chloroform, or whatever anæsthetic agent is used, would penetrate more rapidly to deeper structures than if there was a constant stream of blood to wash it away into the general circulation.

I am, Sir, yours respectfully,

February, 1864. MAC.

THE LUNATIC OF THE ISLE OF MAN.

THE absolute necessity of saving lunatics from their friends and relations, and providing means whereby the unhappy victims of mental disease may, under proper supervision, and after due investigation, receive the attention and the care which are only to be found in asylums, is most strongly illustrated by the case of Waterson, the lunatic in the Isle of Man, whose sufferings are exciting the compassion of the country through the humane efforts of a correspondent of *The Times*. For some time the prejudices and the passions of the public have been stirred by the calumnies of a novelist, which had the apparent temporary sanction—since publicly withdrawn—of no less serious a philanthropist than Mr. Charles Dickens; and these had so falsified the relations of the physician to the patient, and of the sane to the insane, that scant hearing would have been given to anyone who suggested that, spite of exceptional circumstances, the real misfortune of this and of other countries is that the power of inquisition is not more large, and the power of disposal more absolute. The ability of the law to deal with a lunatic is so limited in the Isle of Man, that no remedy has been devised during months for the release of this tortured prisoner, and it will only now be effected by the overwhelming weight of public opinion. But if it be thought that this is a case wholly exceptional, and without a parallel, let one who thinks so turn to the article which we publish to-day on the treatment of lunatics in Scotland; and if, after reading this, he will also ponder on the fact that in England and Wales there are computed to be some 12,000 private lunatics, not in asylums or under supervision of the Commissioners, or in any way reported on, he will probably conclude that the protection and treatment of lunatics under a system of detailed certificates from responsible persons, not connected with asylums, and under the direct supervision of the State, is a measure which greatly needs yet further extension.

X. X. X.—According to a high authority, a good proportion for a ward of twenty patients would be 80 feet in length, 25 feet in breadth, and 15 or 16 feet in height. This would give above 1500 cubic feet to each bed; it would afford 11 feet between foot and foot, and an average of 16 feet to each two beds in width.

A Constant Subscriber.—There would be no impropriety in the proceeding.

IS MERCURY A THERAPEUTIC AGENT?

To the Editor of THE LANCET.

SIR,—In all scientific questions, save those relating to number and space, the only means of ascertaining whether an opinion which we hold be true or false is by allowing it to be fully discussed, and thus hearing all that is to be said on both sides before we deliver our verdict. In order to explain my views on this question, I believe the best course will be to state what was said on the subject in a recent debate at the Harveian Society, which lasted two evenings (Nov. 19th and Dec. 3rd, 1863), after a paper which I read on the "Use of Mercury as a Therapeutic Agent," and I hope this may elicit some further discussion.

In the paper read by me on Nov. 19th, I pointed out the extreme difficulty that lies in the way of the discovery of specifics for disease. We can understand the action of Epsom salts, chloroform, &c., because we know what effects they produce on the healthy human frame; but, with the exception of quinine in ague, we have perhaps no undisputed specific or antidote for any diseased condition. Mr. Stuart Mill, accordingly, points out that the true method of treating disease is the deductive or so-called *rational* treatment. Skey, Desruelles, Copland, &c., have shown that mercury has the physiological property, as shown on dogs, &c., of producing caries of bones and complete degradation of the animal frame. Of all the properties assigned to mercury, its cathartic power is the only undisputed one; and, from its evil effects on some individuals, it appears obviously to be a bad purge. It has been called a cholagogue; but experiments on dogs (Beale's Archives, vol. i.) have shown that it actually *diminishes* the secretion of bile. The use of calomel and opium is now abandoned by the most eminent surgeons in traumatic cases and in peritonitis. In iritis, mercury has been shown to be useless, nay injurious, by Hugh Carmichael, Dr. H. Williams of Boston (who treated sixty-four cases of syphilitic and other iritis without it), by Dr. Hughes Bennett, and by Mr. Zachariah Laurence. Even Mr. Acton confesses that he thinks iritis is sometimes *caused* by the use of mercury. As to pericarditis, the experiments of Dr. John Taylor, of University College Hospital, showed that no good result was obtained from salivation; but, on the contrary, much harm. In acute hydrocephalus, again, Dr. Hughes Bennett and others think that the extreme fatality of this complaint is partly attributable to the calomel used; and as to the use of mercurials in bronchitis, pneumonia, and pleurisy, 150 consecutive cases of uncomplicated pneumonia, recently treated in the Edinburgh Infirmary without bleeding or mercury, have all recovered. Dr. Walshe has never seen mercury useful as an antiphlogistic, but often most injurious. Dr. Hughes Bennett looks upon mercury as simply an evil, and of no therapeutic value. As to syphilis, I believe, with Ricord, Syme, Travers, &c., that ulcers on the genitals and secondary eruptions have always existed, although the ancients did not recognise the relation they bear. Dr. William Fergusson (1812 and 1846) shows how many thousands of the British army had recovered from primary and secondary symptoms perfectly without the use of mercury, and how fearfully the soldiers in the Peninsula suffered from John Hunter's treatment, whilst the Portuguese, without mercury, escaped with a mild and insignificant disease. Mr. Guthrie, late President of the College of Surgeons, shows that all sores on the penis, whether indurated or not, will recover perfectly with rest, diet, and cleanliness, and without mercury. Of 407 ulcers treated by Hennen, iritis occurred only in one, exostosis in one, and there was no case of nasal or other bone affection. In 1818, Dr. John Thompson treated in Edinburgh Castle a large number of troops for ulcers without mercury; the only symptoms observed were sore-throats and eruptions: all getting perfectly well. He saw neither deep ulcers of the skin nor bone disease amongst those untreated by mercury. Dr. Desruelles treated in the Hôpital Val de Grâce of Paris a large number of soldiers with ulcers without mercury, from 1819 up to 1841, with the best results. He mentions in 1841 that 300,000 cases of venereal disease treated without mercury had been recorded. Dr. Fricke treated in the Hamburgh Hospital, from 1824 to 1844, 15,000 cases of venereal disease; and in his "Annalen," published in 1828, he mentions that amongst the patients treated by him with cleanliness, low diet, and hygiene, he had not had any case of iritis or alopecia or bone disease, and that the eruptions which appeared in cases untreated by mercury had been easily and perfectly cured by baths, diet, and Epsom salts. The mean time of treatment for primaries and secondaries, according to Fricke, was thirty-five days. When mercury was used by him, the most frightful forms of the disease were constantly seen. The Swedish Government, from 1822 to 1836, caused 46,687 cases and their treatment to be recorded. The result showed the infinite superiority of the non-mercurial treatment. The experience of the French Council of Health, when 5271 cases were treated without mercury, showed not one case of caries, and only *two* of exostosis. M. Ricord has founded a reactionary school, which, leaving off mercury in gonorrhœa and soft sores, still advises a six months' course of mercury for indurated sores, followed by three months of large doses of iodide of potassium, to prove an *antidote* to the virus. Mr. Syme gives an energetic denunciation of this "fearful system, which has in recent times been founded on the ruins of the *mercurial delusion*." Professor Syme believes that syphilis consists of an ulcer, sometimes followed by sore-throat and slight (though sometimes tedious) eruptions; but never followed by bone disease or any very bad symptoms when mercury is not used. Dr. Hughes Bennett, too, says, "The idea that mercury is an antidote for the syphilitic poison and the incalculable mischief it has caused will constitute a curious episode in the history of medicine at some future day." Mr. Weeden Cooke and Mr. Spencer Wells have both given their opinion that serious tertiary symptoms are owing to the mercury, and are not found in the natural history of the disease. Professor Boëck, of Christiana, has for the last eight years made experiments with and without mercury, and published his results in 1863. 1008 cases of primary and secondary syphilis treated with calomel, bichloride and iodide of mercury, required about 62 days for treatment; whilst 611 similar cases, treated with Epsom salts and external applications, required only about 38 days. Also, when primary symptoms were treated with mercury, 24 per cent. had secondary symptoms; when without it, only 14 per cent. became affected. The direction of the Federal army has lately forbidden the supply of calomel, *on account of the mutilations it has caused*; and Dr. Diday, of Lyons, is treating indurated sores and secondary symptoms with hygiene and external applications, and has related the horrible effects which he has witnessed from Ricord's treatment in causing salivation, apoplexy, mania, and dyspepsia. Docteurs Cullerier and Fournier and others in Paris have now abandoned mercury in treating all venereal ulcers, and await the eruption; which it is to be hoped is only a step in the direction of entirely abandoning the drug which does so much harm in this disease. With regard to infantile syphilis, I believe, with Hennen, that were the parents not treated with mercury, such cases would be *extremely* rare; and again, when they do occur, they are far more successfully treated without mercury than with it, as recently shown by Mr. Allingham and myself.

In the animated debate which followed on the reading of this paper, Mr. de Méric and Mr. Lane advocated the doctrine and practice of M. Ricord. Mr. Weeden Cooke, Mr. Sedgwick, and Dr. Griffith asserted that mercury was injurious in syphilis. Dr. Menzies and Dr. Sisson thought that *small* doses of the drug were useful in syphilis. Dr. Pollock and Dr. Graily Hewitt gave evidence against mercury as an antiphlogistic or in puerperal cases. Mr. Curgenven advocated its use in syphilis and acute hydrocephalus; whilst Dr. Ballard thought it peculiarly dangerous in the latter complaint. Mr. Zachariah Laurence completely abjured the use of mercury in iritis, whether syphilitic or otherwise. Mr. Ernest Hart, although not using it in ordinary iritis, was an advocate for it in *selected* cases of syphilis and syphilitic iritis. Mr. Allingham showed how fatal the treatment of infantile syphilis by mercury was, being 30 per cent. of deaths. He had treated 15 cases without it, and only one had died.

Your obedient servant,

Southampton-row, Feb. 1864. CHARLES R. DRYSDALE, M.D., &c.

Fair Play.—We are not worse than our neighbours. According to a contemporary, "Washington is but a pest-house, where small-pox and typhoid range with undiminished virulence the year through." Uncleanly conditions are the chief sources of disease in a city. There are no laws of hygiene nor any of the appliances of science that can make a filthy population healthy. The only plan to keep a town healthy is expressed in these words—"keep it clean."

The Case of Townley.—Several correspondents have addressed us respecting the state of mind of Townley. We refer them to the leading article on the subject in the present number of THE LANCET.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I regret to see in your retrospect of the year, when alluding to the army medical department, no mention made of the Indian medical department—a body numbering some seven hundred or so, whose services to science and claims on professional support I am sure you would not willingly ignore—and their numerous unrelieved grievances, if not, indeed, the glaring acts of injustice perpetrated on them. Are they to linger on for ever in their present state of hopeless depression without a prospect of redress, and without even the sympathy of their brethren? To the deficiency of modern appliances and drugs mentioned by you, I can add additional testimony that even some of the commonest are not procurable from the medical stores—ex. gr., acetate of potass was several times asked for, being required for European troops; but, instead thereof, the reply "none in store" has been returned. As to the parsimony now exhibited, instead of the liberality under the old *régime*, scarce a monthly return is now sent in from which the medical examiner does not check some paltry items—plantain leaves, brooms, &c., which are deducted from the medical officer's pay, unless he takes the trouble to enter into a long and tedious correspondence on the subject, and succeeds to the satisfaction of said examiner in establishing the actual essential necessity of such extra outlay, of the value perhaps of fourpence or eightpence. I can answer for one case in which the medical officer was checked regularly every month for a few brooms, which he believed essentially requisite for preserving cleanliness, in which opinion others coincided; but the explanation would not satisfy the higher powers. I myself have over and over again paid small items for extras procured in the bazaars rather than enter on the long and annoying correspondence and explanations, without which I would have no chance, and with which but a very slight one, of my claim being allowed.

It would seem as if the authorities wished to disgust all in the service by their niggardly treatment, and appearing to suspect their honesty, as if they drew supplies and consumed or applied them to their own private use. It surely is high time something should be done in the way of change. Can you suggest any remedy for such an agglomeration of grievances as we labour under?

I remain, Sir, yours faithfully,

December, 1863. ANGLO-INDIAN.

A Suffering Poor-law Guardian.—1. A guardian is not justified in giving an order, except in an urgent case; but if the medical officer considers the promulgation of the order irregular, he should attend the case, to save all possible trouble to himself, and then complain to the local board. Should his complaint be not attended to, he may then apply to the Poor-law Board. —2. If he has more than two children, he would be clearly entitled to relief; but in all cases he should attend, and if any cause of complaint exist, he should apply to the Poor-law Board.—3. When summoned to attend under such circumstances, he should do so; but he has a just ground of complaint against those who summon him.

Medicus, (Minster.)—Mr. Ayres' little handbill is a curiosity in its way. It is worthy of preservation. Therefore we give it a place in our columns:—

"BY REQUEST. — Mr. Alfred Ayres, M.R.C.S.E., L.S.A., M.P.S.G.H., will prescribe and supply the necessary medicines, upon all subjects connected with surgery, midwifery, and medicine, every morning, from nine until twelve o'clock, for one shilling. By cards of admission only, obtainable at the surgery."

Alpha.—The preparation sold as "Liquor Bismuthi" consists of oxide of bismuth, citric acid, and ammonia. The quantity of oxide of bismuth present in each fluid drachm is one grain.

Fraser and Andrews Fund.—We have received £2 2s. from Dr. Cape towards this fund.

TREATMENT OF BURNS.

To the Editor of THE LANCET.

SIR,—Mr. Skey, in THE LANCET of January 2nd, makes the following remarks:—"The smarting pain caused by a burn or scald on the hand is relieved, and, if not very severe, is almost removed, by subjecting the hand to the influence of the heat of a fire. The closer it is held—the more severe the pain caused by the undue heat, the greater is the amount of permanent relief. What is the theory of this? I cannot pretend to give a satisfactory explanation of the phenomenon," &c.

Theory.—The burn has produced highly increased action and intensely augmented sensibility, which sensibility or pain is diminished by holding the hand to the fire—that is, exposing it to an influence of the same kind, but inferior in degree, to that which occasioned the injury. *Similia similibus.* In passing suddenly from a hot bath into the cold air, the sensation is disagreeably painful, but would be imperceptible by a gradual transition, whereby the same action is maintained by the same stimulus of heat continued in diminishing degree. The impression of cold air is severely felt by a part whose sensibility has been suddenly and intensely exalted by exposure to hot steam or scalding water, and the extent and effect of this transition are in some degree limited and obviated by the application of carron oil, cotton wool, &c., which prevents the access of the cold air, maintains the heat of the part, and so favours a continuance of the same action. The therapeutic effect of turpentine, nitrate of silver, &c., seems to be dependent on their stimulating agency in maintaining the existing high action in a diminished degree.

The correct treatment and alleviation of pain in frost-bite are explained on similar principles. Frost-bitten parts are rubbed with snow, and the same or existing action is gradually diminished by applying a minor degree of the same stimulus; and in this way also less pain is occasioned than by applications which suddenly attempt to induce an opposite or contrary or different action, as would result from holding frost-bitten fingers to the fire, or covering burns or scalds with bladders of ice.

In such cases where the parts are intensely inflamed and sensitive, pain is increased by applications the object or effect of which is suddenly to produce a different or contrary action—an action at any rate widely different in degree from that which exists. Attempts to occasion a sudden diminution, alteration, or inversion of existing high action in morbidly sensitive parts are extremely painful, and, being also very hazardous, it is better to conduct *gradation* the present state of things to its normal condition, and in so doing we shall fulfil our function *cito, tuto, et jucunde.*

Your constant reader,
February, 1864. A STAFF SURGEON.

Mr. Richard Davis, (Manchester.)—The question as to the qualification referred to is not yet settled. There is some doubt as to the powers conferred by the charter of the Faculty of Physicians and Surgeons of Glasgow. The matter is, however, under the consideration of the Poor-law Board, and an early intimation of the decision arrived at shall be given in the pages of this journal.

R. E. C.—He is entitled to do so.

THE writer of a letter respecting an individual who has lately figured in the courts of law would confer a public service if he would make his statements known (in confidence) to the General Medical Council, who would, no doubt, institute the necessary inquiries.

THE RIGHT OF CORONERS TO APPOINT THEIR SUMMONING OFFICERS.

WE have received a long statement from *Mr. Murrey,* the Coroner's beadle, refuting the charges brought against him by the Vestry of St. Pancras; but as we declined to publish Dr. Collins's letter on the subject, we must also refuse to insert the one forwarded to us by Mr. Murrey.

COURTESY OF COLLEGES.

To the Editor of THE LANCET.

SIR,—At this season, when courses of lectures are about to be delivered at the Colleges of Physicians and Surgeons, it is curious to note the courtesy displayed by those bodies. The College of Surgeons "requests the honour of the attendance" of each of the physicians and assistant-physicians of the metropolitan hospitals by a large card and corresponding envelope, in which are enclosed a syllabus of the courses and a very convenient little "reminder" card; but it ignores altogether its own Fellows, the surgeons and assistant-surgeons, who, it might have been supposed, would have been its first care. The College of Physicians invites its own Fellows, and sends cards to the surgeons of the hospitals, but *not* to the assistant-surgeons, who are also excluded (as inferior animals altogether I suppose) from its *soirées.*

Perhaps a public notice of these little peculiarities may lead the authorities to include,
Your obedient servant,
February, 1864. ASSISTANT-SURGEON.

Syphilographer.—M. Foucher has recommended the use of the proto-iodide of iron in combination with manna. When these are united, a mass is produced in which the proto-iodide is completely preserved from alteration by the action of the manna, and which is easily softened by the mere heat of the hand. Hence the combination has these advantages—viz., the preservation of the iron, and the extreme solubility of the mass in the digestive fluids. Moreover, the manna, being laxative, prevents much of the constipation which might otherwise ensue from the use of the iron alone.

THE EXTRA FEES OF POOR-LAW SURGEONS.

WE understand that much inconvenience is occasioned to the Poor-law Commissioners by the medical officers neglecting to send in their accounts for their extra fees and vaccination fees. It is most desirable that they should all be furnished before the end of the current quarter.

Dr. Griffith H. Griffiths.—We did not think the lectures of sufficient medical interest to appear in the columns of this journal.

MURDER OR SUICIDE?

To the Editor of THE LANCET.

SIR,—A case of some interest in a medico-legal point of view occurred in this district some days since, and was reported in *The Times* of the day, but not correctly so.

A man was found at half-past one o'clock A.M. in a lonely street in the immediate locality of St. George's-street (late Ratcliffe-highway), with his face blown away completely, so that recognition was impossible, except from the contents of his pockets, some letters, &c. The pistol was discovered, according to the police evidence, thirty-nine yards' distant. By what means can such a fact be accounted for? Was it the death struggle causing a rebounding as it were? However, the jury brought their verdict of *felo de se.*

I am, Sir, yours, &c.,
Colet-place, Feb. 1864. M. B. GARRETT, Surgeon.

Lex.—The card has been mislaid. Everything will depend on the power given to the widow. If the affairs of the deceased were entirely in the hands of trustees, the legality of the transfer might be doubtful. If our correspondent will furnish further particulars of the matter, we may be able to give a more definite answer.

J. M. C., M.D.—If our correspondent belong to a University, he may wear the usual academic dress.

One who Dreads the coming Months.—There is no remedy which can be relied upon in all cases. The most trustworthy agents are pepsine, oxalate of cerium, and belladonna applied externally. The subject is treated of in the "Signs and Diseases of Pregnancy," by Dr. Tanner.

ROTHERHAM DISPENSARY.

To the Editor of THE LANCET.

SIR,—I think your correspondent, "Veritas," (page 175,) will find upon inquiry that he is wrong, and that the announcements in THE LANCET of the 23rd January are literally correct. Mr. Robinson *was* elected some months ago (but not two years) to act *pro tem.*; but he was not elected *vice* his brother, Dr. B. Robinson, deceased, until the annual meeting on the 14th ult. At that same meeting Mr. Oxley was elected, *vice* Wilkinson, deceased. All this is verified by the handwritings (now before me) of the two gentlemen who were appointed, and of one of the officials of the dispensary!

I am, Sir, respectfully,
February, 1864. YOUR REPORTER.

FROM great pressure on our space, we are compelled to postpone the publication of the letters of our Dublin, Liverpool, and Aberdeen correspondents, and other important matter.

ERRATA.—Mr. John Thompson Dickson was erroneously stated in our list to have obtained the Cambridge B.A. degree.—In Mr. Critchett's third lecture (p. 148, note), the name "Krönе" should have been spelled "Krohne."

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Copland; Dr. Forbes Winslow; Dr. Edward Smith; Mr. I. B. Brown; Mr. Crampton; Mr. Edwards; Mr. Davey, (with enclosure;) Mr. Yeo, Winchester; Dr. A. Neeson, Aghalie; Dr. Barrett; Mr. Bancks, (with enclosure;) Mr. Castley; Mr. Batty, (with enclosure;) Mr. Hawksworth, Gainsborough; Mr. Bradley, (with enclosure;) Mr. Lightfoot, Llangollen, (with enclosure;) Dr. Musgrave, Lisburn, (with enclosure;) Mr. H. Price; Dr. Watson, Aboyne, (with enclosure;) Mr. Orton, Etruria; Dr. Alston, Airdrie; Mr. Stillwell, Dalton, (with enclosure;) Mr. Miller; Mr. Brierley, Dukinfield; Mr. Woodford, Ventnor, (with enclosure;) Mr. Evans; Mr. Hordley; Dr. Morris, Spalding, (with enclosure;) Mr. Oliver, Whitehaven, (with enclosure;) Mr. Latham, Nottingham, (with enclosure;) Dr. Stewart, Belfast; Mr. Milton, Bradford; Mr. Newcombe; Mr. C. J. Summers, Barnwell; Mr. Pauli, (with enclosure;) Mr. Bullock; Mr. Miles, Halwell; Mr. Hicks, St. Davids; Mr. Ingle, (with enclosure;) Mr. Harvey, Cheltenham; Mr. Elloart, (with enclosure;) Dr. Thursfield, (with enclosure;) Mr. Swinson, (with enclosure;) Mr. M'Ardle, Newport; Mr. O'Brien, Royal Portsmouth Hospital, (with enclosure;) Mr. Bennett, Worksop; Mr. W. Robinson, Charing, (with enclosure;) Mr. Stride, Brighton; Mr. Jenkins; Mr. Garrett; Mr. J. Bradshaw, Thurles, (with enclosure;) Mr. Earnshaw, Manchester; Dr. Bain, Albrighton, (with enclosure;) Mr. J. Hancock, Bellevue, (with enclosure;) Mr. L. Crossley; Mr. Leggatt, Eastry; Dr. Burder, Bristol, (with enclosure;) Mr. Collyer, Leicester; Mr. Dickson, Cambridge; Dr. Macleod, Ben Rhydding, (with enclosure;) Mr. Wilson, Alnwick, (with enclosure;) Mr. Parker, Birmingham; Mr. Ward, Lincoln; Mr. Spanton, Sheffield; Mr. Matthews, (with enclosure;) Dr. Griffiths, Church Stretton; Dr. Robertson, Edinburgh; Dr. M'Loskey, Rothwell, (with enclosure;) Mr. Mercer, (with enclosure;) Dr. Wood, Rochdale; Mr. Gell, Birmingham; Society for Relief of Widows and Orphans of Medical Men; Pharmaceutical Society; M.D., Bath; Ethnological Society; B. A., (with enclosure;) Alpha; &c. &c.